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Edited by JAMES EARL RUSSELL

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TEACHERS COLLEGE RECORD

VOL. XIX MAY, 1918 No. 3

EDUCATION FOR DEMOCRACY*

By JAMES EARL RUSSELL

Dean of Teachers College

The teaching profession, it seems to me, is singularly indifferent to the signs of the times. Either we are content to attend to business as usual because we don't know what else to do, or we fail to realize the significance of the revolution which is upon us. It would seem that of all vocations, ours should be the quickest to respond to the call to democracy, and the first to propose ways and means of making democracy safe for the world. Inasmuch as a confession of not knowing what to do belies our claims to professional leadership, and failure to understand the meaning of events implies an awful ignorance of precisely that history which we are supposed to teach, I am obliged, out of polite consideration for my co-workers, to seek elsewhere for the causes of our somnolence.

The truth is, as I see it, we teachers are much like other folks; we have not taken our democracy very seriously. We have all wanted to do as we pleased, and to be let alone in working out our own individual salvation. For this private advantage, we have been willing to entrust our civil government to the tender mercies of petty politicians and party bosses; we have winked at the violation of law, and tolerated slavery, and serfdom, and industrial oppression; we have been indifferent to the ravages of plunder and greed, and to the losses due to administrative inefficiency. All these faults we have been guilty of at times,—and worse, if worse there be—but such faults as these are in reality

*Address before the Alumni Association of Teachers College, February 22, 1918

the concomitants of our virtues. We have sinned in these respects, simply because our faith in mankind is so strong. We are essentially optimists, and we have relied on the best in humanity to overcome the worst. In evidence of our national good intent I have only to point out what has happened when the public conscience has been aroused. Political parties have been punished for their shortcomings, slavery has been abolished, plunderers have been overwhelmed, the thraldom of child labor has been lightened, corporate greed has been checked, and the prohibition of social evils has been enjoined by highest law. It is characteristic of the democratic mind to believe the best of all mankind, to have faith that somehow the good will triumph over the bad. But it is equally true of the individualist that he wants his own way, and that he will wreak his vengeance upon those who persistently betray his confidence. The present world commotion shows that the optimists have been betrayed by those in whom they have put their trust. Vengeance is mine, is their watchword. The outcome bids fair to match the bitterness of their disappointment.

The striving of the world towards democracy is as old as human society. The "inalienable rights of man" are the natural outcome of the instinct to self-expression and self-realization. The doctrine of brotherly love formulated by Jesus and propagated by the Christian Church as a world religion, has been bedded deep in the consciousness of the modern world. But nowhere has there been a democratic state. The age-long struggle between autocracy and democracy has never resulted in the complete suppression of the one or the complete victory of the other. At best the result has been an aristocracy or oligarchy, with leanings towards autocracy or towards democracy. The ordinary affairs of life go on much the same under any decent government. One must keep off the grass, if the park is worth preserving; keep the fire-escape clear if safety is essential; observe the regulations of the health officer in time of quarantine; pay one's debts, and live up to contracts; help others when they are in need; tell the truth, fear God, and shame the devil. It matters a great deal, however, what is one's attitude toward these obligations and how one comes to recognize them as obligations. If the attitude is one of subservient acquiescence engendered by fear, or even by unques-

tioning obedience to external authority, the leaning is towards autocracy. If, on the contrary, conduct springs from an understanding of the necessity of such action, or if obligation is accepted after reasonable consideration by those concerned, the emphasis is democratic.

Our policy has been to abide by the rule of the majority. We have advocated liberty under the law, and assumed that the law was just. Now the previous question is being put. Is the law just? Who shall say? What is liberty? On the answer to these questions depends all our future happiness, all our hope for ourselves, our children, and our country. If justice cannot be assured by the rule of the majority, who shall decide what is right? Shall a group of intellectuals? Shall a political party? Shall an industrial corporation? Shall a labor union? Shall any one class in the state enjoy the privilege of setting standards for all others? If not a class or a group or a party, shall each one decide what is right for himself? Our oldest history tells us in its own strong Biblical phrase, that when "every man did that which was right in his own eyes," there was anarchy in the land. It may be providential that we see clearly to-day the logical end of two extremes of government: Germany, the confessed autocrat, surfeited with ambition and drunk with power, trampling on the rights of individuals to gain world dominion for a favored few; Russia, the would-be democrat, impatient of restraint and blind to all sense of civic duty, groveling in anarchy, that each citizen may do as he pleases. If these lessons shall be learned, the war will not have been fought in vain.

Whatever may have been the purpose of those who started the war, however selfish the intent of either party at the beginning, it is perfectly clear now that the public conscience of those opposed to the forces of autocracy is stirred to the depths. The whole world is leaning towards democracy. We may not know what democracy means; we may be blind to the evils of a system that easily substitutes license for liberty; we may be selling our birthright for a mess of pottage; but we have reached the decision that a change is inevitable. Indeed, the change has already come. Every day a new order of Government is handed down, regulating transportation by rail and water, fixing prices of necessary

commodities, telling us what we shall eat and how we shall clothe ourselves—all to the end, it is said, that we may win the war. It seems to me, rather, that we are being disciplined by an inexorable schoolmaster to meet the hardships of the future. Just now, like naughty children, we are doubtless scared into being good. Later on, when the fright is past, we shall be disposed to slip back into our old ways. The slogan, "Business as usual," will ring out all over the land. Trade and transportation will make desperate efforts to recoup their losses; store and factory, farm and market, school and college, will gravitate towards their old positions. Let no one, however, make the mistake of thinking that any of these enterprises will ever again be what they were before the war. A government that shows it can take over railroads and commandeer shipping fleets, will never again be helpless in the regulation of transportation; the power that can fix the price of coal and wheat, will have the chance to try it again on a larger scale, when the majority so decrees; if subsidies can be provided to buy farms, build workmen's houses, and supply luncheons for school children, it is only a short step to public largesses for all who are hungry or in need of financial aid. And by these very means democracy may be easily transformed into anarchy. Call it what you will—socialism, Bolshevism, or something worse,—we have passed the era of free competition, where each stood on his rights and was disposed to define his rights to suit himself, into another era, wherein the ideal is justice for all, and for each the right to get what he deserves. The majority may continue to rule, but it must be a majority that exercises the duty of protecting the rights of the minority. While philosophers are striving to define the meaning of democracy and statesmen are giving a civic form to social justice, schoolmasters will be wrestling with a new set of pedagogical problems. The doctrine that all shall get what they deserve presupposes that the largest possible number shall be taught to want what it is right that they should have. The fundamental problem of a democratic state, as I see it, is an educational one: the problem of teaching the proper appreciation of life-values and of training citizens to act in accord with the precepts of the Golden Rule.

It is easy to talk in general terms, as I have been doing. Almost everybody nowadays who talks at all, talks in that way. It is

a convenient way of concealing thought. It is high time, however, that some one should make concrete suggestions of the 'brass tack' variety. It is even more important that some one should do something worth while. Nowhere is the need greater than in our own field. I would that I could both say the proper word and do the proper thing, but I am neither a philosopher nor a pedagogical expert. The most I can do is to appeal to you graduates of Teachers College to do your bit, and to do it before it is too late. I can put to you the questions which the public will soon be asking, and for which answers speedily will be demanded. The reaction of any one of us may be of little weight, but the voice of 25,000 Teachers College students can make itself heard.

The first question is, What are the schools for? The stereotyped answer is, The schools are for all the people. Suppose, however, that when the balance of power in our Government goes over to those who, in Mr. Schwab's words, "work with their hands," your new masters say that the schools are not, and never have been, intended to meet the needs of their children, that they were established to train leaders for Church and State, that their chief function to-day is to equip a favored few for professional work, that they cater to an aristocracy of high-brows and money-getters, that they spend the people's money to make one of a hundred the master of the other ninety-nine, and that, in short, they are not democratic either in aim or in method. The ready retort to such a challenge is that American schools, from the lowest to the highest, are open to all, that no one is denied educational advantages by reason of race, creed, or previous condition of servitude, that public education is free, and that the system provides for instruction in any subject and to any extent that the public is willing to support.

But in saying that, you are really asking the next question, What should our schools teach? Should they offer instruction in any subject and to any extent that the public is willing to support? Is the converse true, that what the public, or that part of the public that happens to be in control, does not want, or has no use for, should be eliminated? If it be true that class interests in the past have operated to restrict educational advantages to a favored few, will new class interests in future seek to retaliate by giving special privileges to some other class?

And finally, Who shall control our schools? Shall it continue to be lay boards, chosen by popular vote, or selected to represent some political party or local group? Shall our schools and teachers be at the mercy of those who, happening to have a little power, use it in a little way? Is the expert in education to be merely the paid agent of a board or a party or a labor union? How otherwise can a democracy attain its ends but by controlling the education of future citizens? If some citizens are set aside for the purpose of teaching, how can you be sure they will teach the democratic faith? Shall we have some day a pedagogical creed to which teachers, like theologues, must subscribe? Will that lead to trials for heresy and the dismissal of non-conformists? Will a democracy find it expedient to substitute for the established church of the old régime a state-supported and state-controlled school system? If that should come to pass, wherein would democracy essentially differ from autocracy?

Despite the apparent *reductio ad absurdum*, these questions are not trivial. It were easy to point out sufficient cause for every question listed here. For example, who doubts that our schools denied equal opportunity to all for gaining a livelihood until, within a decade, the demand for vocational training could no longer be resisted? And who would say, even now, that children who want training for work in shop and factory, for store and counting-house, for farm and home, can get what they need as freely and as universally as those who can afford to go forward to professional service can get theirs? Moreover, it is all too true that many of those who have profited most from professional training, given them at public expense, have miserably failed to return to the public that kind of service which professional honor demands. When the great State of New York undertakes to prescribe military drill, and Ohio to portray the evils of alcoholic indulgence by text-book and prescribed lessons, we may confidently expect other states to require the study of civics of a particular brand. If German can be eliminated from the schools by act of a board of education, why not Latin or history or mathematics? If Garyized schools can be a party issue in New York City, and thrown out by popular vote on the grounds of expense, who knows when the high schools and the College of the City of New York will go the same route?

If teachers can be dismissed from service because they can not conscientiously support some of the actions of our present Government, how can permanence of tenure be assured to disloyalists under some succeeding government? The theory that to the victors belong the spoils has been too long a recognized principle of action to make improbable that it will never again be revived. If democracy undertakes this line of advance, it will need for fulfillment both a State Church and a State School, supplemented by liberal largesses to the proletariat, to keep the citizens in order. The final scene is reached when the travesty of democracy gives way to a military dictatorship.

Perhaps I have said enough to cast some doubt on the sufficiency of old ways and means to meet new conditions. My own belief is that so long as we cling to our old habits of thinking and acting, we shall never solve the problems of our new democracy. The new order demands a new philosophy and a new mode of attack. If the difference between an autocratic state and a democratic state be a matter of emphasis, it follows that the system of education adapted to an autocratic society will differ from the system adapted to a democratic society chiefly in the way it leans. The autocratic state puts power in the hands of a few, and trains them to use it in the interests of a privileged class; it binds the many down by the discipline of obedience, of reverence, and of poverty. The thirst for power stimulates the greed of money, the search for usable knowledge, and the demand for practical efficiency. The democratic state, on the other hand, emphasizes the rights of man, and imposes on each citizen the duty of being his brother's keeper. The educational program of a democracy, therefore, must stress the universality and the practicability of moral forces.

A survey of the recent history of education in the United States raises considerable doubt of our pedagogical contribution to democracy. In our universities, we have made an idol of scientific research; we have weighed and measured and timed everything capable of being accurately tested by quantitative methods; we have used our technical schools to forward every conceivable application of science to art and industry; we have rejoiced in invention, and—too often—have set the dollar mark as the crown of success in discovery. In our lower schools we

have concerned ourselves with curricula and courses of study and efficiency in administration. We have systematized and standardized and organized our work so that untrained or half-trained teachers might get measurable results. From grade to grade and from school to school, promotion has depended upon the passing of examinations on what pupils have accumulated for exhibition purposes. Had it not been for the wholesome common sense of our public school teachers, I doubt not that the German standard of scholarship and the German standard of efficiency would long ago have dominated our lower schools as they have controlled the policy of our universities.

Now, I have no quarrel with scholarship or scientific research. If a democracy can not stand the truth, it can not endure; and if it ceases to add to human knowledge, it will surely stagnate and finally deserve to perish. The trouble with our schools and colleges is that they have been satisfied with knowledge put up, like breakfast foods, in small packages with attractive labels but indigestible contents. The main thing has been to get knowledge because, in the words laboriously copied when we were learning to write, "Knowledge is Power," but in our getting we have sometimes forgotten the injunction of the wise man to get understanding. We have been so keen to get the exact letter of the truth, so exact that the degree of variability can be measured and recorded in decimals of many points, that we have often missed the spirit that giveth life. Exactness is no crime, however, and measurement is not a sin. In fact, Americans might safely accustom themselves to greater exactness and apply more certain measurement to their work. The fault is, not that we have been too accurate, but that we have given too little attention to the relative worth and moral significance of the facts at our command.

The ideals of the democracy towards which we are leaning are essentially moral, rather than intellectual or material. The intellectual and the material we have with us, and we are not likely to quit our hold on either. What I fear is that we shall not quickly seize upon the moral issues now presented to us and incorporate them into our educational system. There is an autocratic way of doing things and there is a democratic way. The autocratic method stresses constituted authority, hands

down rules and regulations, asks not the reasons why, assumes to know *a priori* what is best and right, and brooks no interference from those who may prefer not to be benefited in such predetermined fashion. The democratic method depends for its success upon coöperative effort and the acceptance of standards that are reasonably convincing. The one tends to drive; the other to lead. The subject of a monarchical state is not asked to understand, he need only obey. The free citizen who understands but does not obey is a menace to the state; he must know the right, accept it, and then unhesitatingly do his duty. In a final analysis, the safety of the state, the maintenance of civil order and social stability, depends primarily upon the discipline that makes right conduct habitual.

Americans are obsessed with a knowledge of the rights of man. We take it in with our mother's milk; it seems to pervade the very air we breathe. But we are slow to learn that for every right there is a corresponding duty, for every privilege, a corresponding responsibility. A right once learned is immediately in working order, but a duty recognized may result in nothing more than a twinge of conscience. A duty does not become a potent force until it is fixed in habit. Once grant that schools are responsible for the character of their students, that they must teach the moral law, and see that its precepts function in the lives of citizens, we are transported into a new pedagogical realm. The most important part of our business, then, becomes a matter of method. Discipline of a special kind takes a commanding place. How shall right habits be inculcated, and how shall selfish traits be eliminated? Answer this question, and you are on the high road to success in the new pedagogical era.

Some one may say, however, that right habits and good character are matters of opinion, that what suits one may not suit another, and that it will be just as difficult to satisfy our prospective masters on these points as on any other. My reply is that the freedom of a democracy consists not in doing what you please as an individual, nor in doing what you please as a class or party, but rather in the privilege of choosing your own authority and following your own leaders. It is the essence of government to rule, and the authority of a government must be respected. No one of us can escape the necessity of obedience

to custom and law. We must yield or be outcasts of society. Under an autocracy we obey without question; under a democracy, we question and then obey. In either case, obedience is a virtue and disobedience a sin or crime. The strongest motive to conformity in the one case is confidence in the ruling power; the dominant force in the other is the desire to see things straight and see them whole. The evaluation of authority, either in the choice of leaders or the acceptance of standards, is a responsibility that may not be shirked by any citizen of a democratic state. It is the *raison d'être* of public education for all the people and to the widest extent.

A democracy does not raise the question of transcendental right. It sees nothing esoteric in the Golden Rule, and knows that no government or nation can long endure that disregards it. If the new democracy be merely a guise for a new kind of class selfishness, it will not last; if it have no higher purpose than to exploit those who disagree, it is bound to lose. I have faith that men capable of reconstructing a world that has been drenched with blood, weighed down with poverty, and overwhelmed with sorrow, will not be found wanting either in sympathy or vision or common sense. Mistakes will doubtless be made, and progress may be slow, but if the new generation be taught aright, success will surely come. The corner stone of the new state will be education—not merely instruction in things worth knowing, but also discipline in things worth doing. It will be education for citizenship in a society that is pledged to maintain justice for all and to guarantee to each the attainment of what he deserves. This is work for strong teachers—teachers who can free themselves from hampering traditions, teachers who can rise above party and class and creed, teachers who practise what they preach, and who preach only the truth. Such teachers need fear no act of legislature nor any mandate of a governing board. Bound by professional honor, they will command liberty for themselves by assuring freedom to their fellowmen. Servants of the State, they will show their loyalty in patriotic deeds. They call to us to come up higher. It is our reasonable service. We can do no less and be true to the highest ideals of our profession.

HOME ECONOMICS STUDIES IN GRADES SEVEN TO TWELVE*

By Professors ANNA M. COOLEY, CORA M. WINCHELL, WILHELMINA SPOHR, and Miss JOSEPHINE A. MARSHALL
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(*Continued from the March number*)

PART II

HOME ECONOMICS STUDIES BASED ON THE 8–4 PLAN OF ORGANIZATION

I. HOME ECONOMICS STUDIES FOR THE 7TH AND 8TH YEARS, BASED UPON INDUSTRIAL ARTS IN GRADES 1–6

1. *Aims.* With the advent of the adolescent stage of development, the demand for courses designed to meet the particular *interests and needs* of girls is met by the organization of the course in home economics for upper elementary schools in the 8–4 plan, and for the junior high school in the 6–3–3 plan of organization. The work of these years has, as its basis, the work in industrial arts of Grades 1–6, which should give, as has already been said, a foundation of intelligent understanding of the processes involved in the production and manufacture of foods and textiles, and an understanding of activities connected with the building and care of the home, together with a degree of skill in manipulation through participation in some of those processes and activities.

In the 8–4 scheme of organization there are to be found girls with two distinct aims:

(*a*) Those who will continue their education through the four years of high school.

(*b*) Those who must, because of economic pressure, leave school at the end of the eighth year.

In planning a course in home economics it is necessary to provide for both groups. In either case the aim of home economics

*This article is one of four parts which together will define the content and conduct of the Home Economics subjects for Grades 7 to 12.

studies in the seventh and eighth years is primarily for general education. The course should give to every girl that knowledge and skill in the processes and activities connected with the home which should be an integral part of the education of every young woman, regardless of her future occupation.

It is natural to woman to establish a home about her; and in order to encourage this tendency and to equip her with a body of working principles, the course in home economics should offer as well rounded a body of material in relation to foods, clothing, shelter, and right living, as it is wise to present to the girl at this age. Fortunately, the present problems in the girl's life offer a tangible basis for the organization of this material; her present share in the care and responsibilities of her home, and in the social life of school, church, and community presents very vital interests upon which the home economics course may be developed.

For the girls who continue their work in the high school, the plan of the high school work in home economics will result in the utilization of the work of Grades 7 and 8 as a basis for a richer course, both in scope of subject matter, and in opportunities for application of the principles already taught, with the introduction of additional principles fitted to the age and ability of the girls at the various stages of advancement.

2. *Time.* The time to be devoted to the course in household arts in the seventh and eighth years will vary with the school system. The length of the laboratory period should be 80 to 120 minutes. If the course can be organized in such a way as to include within its scope, either wholly or in part, the work in hygiene, art, and science which is usually taught in separate periods, the time for this comprehensive course could be increased to cover the combined time of all these subjects when taught separately. If, however, this organization is impossible, at least two double periods (80–120 minutes each) and one or two single discussion periods (40–60 minutes) should be allotted to the work in home economics in Grades 7 and 8, in order to make the work worthy of a place in the upper elementary school. The strongest teacher of home economics must have time to teach properly those subjects which relate so closely to the lives of the girls, for the processes themselves are time consuming; and she must also have sufficiently close contact with the girls

to know them and to help in guiding them in the development of their ideals in relation to their individual responsibilities in home and community.

3. *Correlation.* The home economics studies offer many opportunities for *correlation* with other subjects in the school, thus lending themselves easily to the development of a well-knit, unified curriculum. Based, as much of the work is, on underlying principles of science, the interrelations of the natural and physical sciences with the home economics subjects should be carefully worked out and applied as frequently as possible to their mutual strengthening. The fact that girls are often not interested in science and do not grasp its principles has given rise to the statement that they have not scientific minds and hence cannot learn the subject. However, this condition is really due not to the fact that the girl has any less ability for comprehending scientific truth, but rather to the fact that in the past the principles of science have been taught through phenomena that do not come into the life and knowledge of the girl and which consequently have had little meaning or interest for her. If her chemistry, physics, and biology are taught in connection with the materials and processes she is accustomed to use every day in her home and school life,—the chemistry of foods and textiles, the physics of the kitchen range and the heating system of her home, the biology of the cleaning and preserving lessons of her home economics course, the hygiene of her own personal life and surroundings,—it will be observed that her interest is quite as keen and her mental processes quite as alert as are those of the boy when he studies his steam engine or automobile.

It has not been the custom in the past to introduce science work other than the nature study and geography of the early elementary grades, before the first year of high school or the ninth year. Since a very large percentage of the pupils never enter high school it is evident that large numbers leave school altogether with little or no knowledge of the physical world by which they are surrounded. There seems no valid reason why these subjects in the form of general science should not form a part of the instruction of the seventh and eighth grades and it has been recommended that such studies be introduced into Grades 7 to 9 under the general title of "Introduction

to science, with special subdivisions of hygienic and chemico-physical study;" and that the studies "should be scientific, although not science in the strict sense. That is, they should follow methods of science, but not its characteristic generalizations."

If the home economics teacher has the proper preparation, general science may well form an integral part of the home economics course, and its applications and illustrations may be taken from that field, thus making for economy of time as well as for a surer understanding of the principles.

There are many vital civic and social problems involved in the home economic subjects making for close relationship with the social studies and whenever opportunity presents itself this interrelation should be emphasized. For instance, no history of industry would omit the subject of the industrial revolution and its profound effects on economic and social conditions and no discussion of the industrial revolution could ignore the part played by the invention of the great spinning and weaving machinery. So, too, the congregation of peoples in cities necessitates greater care in regard to health, both of the individual and of the community, and creates a need for special officers to guard the city's food and water supply; while the congestion in certain districts of the cities brings greater danger from fire and disaster, thus causing a demand for housing and fire laws and regulations. Both are civic problems but so vital to the welfare of the home that they should receive consideration in any study of home problems.

There are many opportunities for the use of arithmetic presented by the problems arising in textiles, foods, and home life—calculation of amounts of materials for garments, measurements for curtains and estimation of materials needed, calculation of costs of foods and of recipes, opportunities for use of percentage in composition of foods, division of the income, budgets, etc.—and in these the instructors of mathematics and home economics may be mutually helpful.

The art work should be closely correlated with the work in textiles, clothing, and house furnishings no matter by whom the instruction is given. It is not recommended that only such art as may be applied directly in these fields should be given, but on

the contrary it is urged that some work in art appreciation, a study of fine examples of painting and architecture suitable for children of those ages, should form a part of the training. But it is also urged that wherever in the home economics work art and design have any specific application those problems should be worked out in close coöperation with the art teacher and in accordance with the best principles of art instruction.

The home economics teacher may be very greatly assisted in her presentation of the ideals of home and of the ideal home spirit if in the English class selections which portray this ideal home life are read and their message discussed. Suitable books and poems, which might be suggested are: *Mother Carey's Chickens*, Wiggins; *Little Women*, Alcott; *Strawberry Acres*, Richmond; *Bits of Talk about Home Matters*, Helen Hunt Jackson; *Snow Bound*, Whittier; *Cotter's Saturday Night*, Burns.

Where there is a spirit of helpful coöperation in the school any opportunity for application in one department to the work in another will be eagerly sought for and seized upon by the instructors in all departments.

4. *Equipment.* As the term home economics implies, this training is primarily for use in the home and consequently the *equipment* furnished the pupils should as far as practicable duplicate what should be found in a well-equipped kitchen in the homes represented by the girls attending the school. Thus it would be impractical to furnish the school kitchen with large quantities of expensive utensils and appliances totally out of reach of the students using them—aluminum cooking utensils for girls whose own home equipment must be largely secured from the ten-cent store. It would be just as undesirable to equip with meager furnishings those schools whose pupils come from homes where expense is never weighed against convenience. To have the equipment as nearly as possible duplicate home conditions is the ideal and to this end the school apartment, practice house, or suite of rooms in addition to the regular laboratory is being furnished in many schools. Thus the pupils may have at least a part of their instruction in both foods and textiles among home-like surroundings. They will also deal with true home problems, and by so doing help to strengthen the connection between home and school with the belief that what is thus learned in the

laboratory will be carried over and applied in the home life of the girls themselves. Where this is not feasible, or even in some instances in addition to the apartment, unit kitchens may be set up in some parts of the regular laboratory, corners set off by screens, cords, or piping to form small rooms, in which the equipment duplicates the home kitchen and in which the pupils may in turn have practice in preparing dishes in family quantities.

The problem of practical quantities is a difficult one for the teacher to solve. To have the pupils always work in small individual quantities does not give sufficient practice in manipulation and is frequently one reason why the work fails to function in the home life of the girls; but to work even occasionally in family quantities requires some outlet for the use of the products both to reduce cost and to prevent waste. Where there is a lunch room in connection with the school it may be used advantageously for surplus products, the children of the eighth grade certainly being able to make dishes that could be utilized in this way and in some instances the seventh grade would also be a limited contributor.

The regular laboratory equipment should be supplied for individual work wherever it is possible to do this, the quantity and elaboration depending only on the aims of the school, the needs of the pupils, and the amount of money available.

That none of these plans is feasible for any particular locality need not prevent the introduction of the work into any school for it is quite possible by planning and fitting for group work instead of for individual instruction to install fairly satisfactory equipment which, though not ideal, is none the less usable and capable of producing good results. Where space and the number of rooms are limited, one end of a large, well-lighted room may be used for the foods laboratory, while the other end may be fitted up for the textiles and clothing.

The textile and clothing work requires less in the way of equipment than does the foods and cookery. It is possible, if necessary, to teach the sewing in the regular class-room, though this is not so satisfactory, and wherever a well-lighted room may be secured especially for the work, it should be fitted out with large-sized tables and good machines, the number depending on the size of the classes to be taught. The individual sewing equip-

ment—scissors, tape measures, thimbles, etc.—may be furnished by the school at a very small cost per capita or may be furnished by the pupils themselves.

Home Economics Studies for the Seventh Year

It was suggested on page 125, March RECORD, that the home economics work in the seventh and eighth grades might be termed general household arts to include the subjects of food, clothing, shelter, and the family in the several aspects indicated.

To give assistance in organizing the work for these two grades it might be well to indicate the center of interest in each, around which the activities may revolve. The girl and her home can not easily be separated, but during the seventh grade the *girl* may be the center of thought and *her part* in the solution of problems concerning food, clothing, shelter, and the family may be emphasized. Her problem may be to determine what she should know and do about food, clothing, and shelter in order to do her part as member of her family and of society. Her solutions will be found in increasing her knowledge and in developing her ability to do along the various lines of household activity in connection with the following:

(*a*) *Food.* Given definite situations to meet, such as income, health, and conservation requirements, market conditions, etc., what foods shall the girl be able to select, prepare, and serve so that she may be of help in doing the same with intelligence in her own home? This question must be answered in terms corresponding to the question, and will of necessity be worked out differently in different localities.

The various processes of cooking when applied to simple food combinations can easily be accomplished by the girl and an able teacher will plan to make use of all of them during the year.

Various types of food material representing the several food principles should be utilized and the effects of dry and moist heat, salt, acids, etc., upon them should be taught as opportunity arises other than through the method of adhering to a stereotyped logical course of study based upon the accumulated knowledge of the scientist. The serving of food in a manner that may be utilized in the home, the care of foods, both before and after

cooking, the choice of foods for various occasions should all receive the consideration the topics merit and there should be conscious effort on the part of the teacher to include them.

(*b*) *Clothing.* The questions of economy, conservation, hygiene, and art enter into the solution of clothing problems; and again the varying conditions of different situations must determine their solutions. The subject matter will revolve around the practical work of the sewing room. The construction of a garment of interest to the girl, such as an attractive apron, a pair of bloomers, a middy blouse, or a Red Cross garment gives opportunity for textile study in the choice of material, the study of patterns and their economical placing, the study of many sewing processes to be accomplished by hand and by machine, the hygiene of clothing, including the laundering of simple articles, the comparative cost of home-made and ready-made garments, and any other topics of vital interest.

The question of economy and conservation makes the care, repair, and remodeling of garments, and the removal of spots and stains a necessary consideration. The question of the choice of becoming line and color at once becomes a feature of interest and time should be taken to develop this phase.

(*c*) *Shelter.* In connection with shelter the girl shares an interest. There are many home activities with which seventh grade girls should be acquainted and which should be utilized as a basis for instruction in school. The care of the girl's own bedroom, the help she can give in the care of other rooms in the home, problems of cleaning in connection with the work in the kitchen, and the preparation of food, are all topics that should be provided for in any course of study and when properly motivated meet with the enthusiastic response typical of the girl at this age.

Home Economics Studies for the Eighth Year

It is advisable that the home economics studies for the eighth grade be planned in such a way that the girl will have during the last year of the elementary school, when she is perhaps best prepared to receive it, an introduction to those studies which will give her an appreciation of the significance of a normal, well-regulated

home and the benefits it bestows, as well as the possible relationship of this home to the community of homes. This is important whether the girl continues her education through the four years of the high school or leaves to go to work, or to remain at home at the end of this period.

The problems to be solved by the girls are all very vital and are those which they hear discussed daily in their homes, but the teacher of home economics is to help shed new light on methods and ways of solving these home problems which will help the girl to lead a more helpful and healthful life in her family and community.

In order to give the girl an appreciation for normal home life the following topics should be considered and may be stated problematically to the girl in introducing her to them. They may be solved in the class-room laboratory or the supplementary school apartment or practice house, or some phases of work planned for each:

1. The selection of the home: Based on division of income, sanitation; location in relation to work, school, etc.	Where shall we live?
2. Decorating the house and furnishing it for a certain amount:	How shall we decorate and furnish the house in the most tasteful way, considering expense?
3. The division of the family income:	How shall the family income be divided so as to give the greatest amount of satisfaction?
(*a*) For food	How much shall we spend for food?
(*b*) For clothing	How much shall we spend for clothing?
(*c*) For rent	How much shall we pay for rent?
(*d*) For operating expenses	How much shall we spend for lighting, heating, and other running expenses?
(*e*) For savings	How much should my family aim to save each year?
(*f*) For recreation, etc.	What kind of recreation shall we have; where shall we get it?

4. Care of the house:	
(*a*) Cleanliness Housewifery methods	What should we know in order to keep the house clean and to manage it well?
(*b*) Repairs, refurnishing	When shall the house furnishings be replenished?
5. The relation of economy to efficiency in the family life:	How can we spend or save so as to make all the members of the family most efficient?
(*a*) Saving and spending	Of the time saved, how can it be used to best advantage?
(*b*) Necessary foods Values Combinations	What kinds of foods do the various members of the family need? What combinations are pleasing in meals?
Serving of	How can the meals be prepared so as to have all ready at the same time? How shall the dinner be served?
(*c*) Home-made *vs.* ready-made clothing Kinds of clothing	What kind of clothing shall the various members of the family need? Shall it be bought ready-made or be made at home?
(*d*) Recreation Summer vacation Amusement and use of leisure time	What other factors will help to maintain health?
6. Responsibilities of the members of the family outside the home:	How can I prepare myself to be a helpful factor in the community? What are my responsibilities?
(*a*) Church associations	
(*b*) Neighborhood ethics	
(*c*) Municipal housekeeping Pure food Markets, weights and measures Laundry and bakery conditions, etc.	
(*d*) Consumers League	
(*e*) Child Labor, etc.	

The solving of these problems of the home centers about its activities—the planning of the family income so as to buy a living place of the best possible kind, the best and most nutritious

food for the money available, the most suitable forms of recreation for the group, the most advantageous methods of saving, the most satisfactory methods of caring for the home and its individual members.

In choosing the studies and planning the course of daily lessons with its problems, the activities will be emphasized upon certain days, while other periods will be devoted to discussion of problems. For example: The activities may emphasize the cooking of a well-balanced meal for a family of six at a cost of fifteen cents per capita; the baking of bread and comparison with the cost of baker's bread; or again the cleaning of the dining room and the bathroom with their related problems of science. It may be the cutting out of a middy blouse to be made at school with the related problems of ready-made and home-made values, or the designing of a suitable school coat or dress. At other times when discussion is in order, the problem may be the division of the family income; suitable recreation for the family; ways of saving; standards for healthful, sane living; selection of suitable textiles for furnishing the bedroom or living room; suitable types of furniture to be used; or actual excursions may be taken as the method of conducting some lessons in order to see and buy the furnishings, if an apartment or house is to be equipped.

All these problems or topics should be so arranged in the daily course of study as to offer continuity of thought. There may be a controlling problem for the year stated, as for example: "What are the daily problems of my family—mother, father, three children, and grandfather? The family lives in Cleveland, Ohio, and has an income of $1,200."

This big problem will naturally subdivide itself into the smaller problems which will contribute to the solving of this big controlling idea for the year. The sub-problems may be such as described in the above paragraph—and each of these may often be solved through the execution of a certain project.

II. HOME ECONOMICS STUDIES FOR THE FOUR YEARS OF HIGH SCHOOL BASED UPON THE WORK OF THE SEVENTH AND EIGHTH GRADES

Home Economics Studies for Liberal Education. The home economics studies, as found in education to-day, have two defi-

nite and distinct goals; namely, *liberal education* and *vocational training*. Into the life of every normal girl will come the inevitable problems of production and consumption in relation to her personal needs and in relation to the home and its activities. It is our belief, therefore, that every girl in planning her high school work should organize her program so as to include at some time during her high school years certain phases of home economics work in order that she may be prepared to solve these problems with intelligence. Furthermore, as a citizen the girl will be a factor in the solution of many civic and national problems related to the home; and a course in home economics for liberal education should, if well organized from the standpoint of content and methods of teaching, lay the foundations for intelligent and sympathetic appreciation, interpretation, and action.

To some of these same girls will come the need for specialized training in some vocational industrial occupation such as that of dressmaker, milliner, caterer, etc., or in the vocation of homemaking. Home economics for vocational training will be discussed in the next section of this report. The present section treats of the work in home economics which should enter into the life of every high school girl, regardless of her life work. Many vocations which the high school girl may enter later, such as public health work, nursing, school nursing, house decoration and other lines of commercial art, demand the fundamental training which is offered here as home economics for liberal education.

The following classification has been agreed upon as including all groups of girls for whom courses in home economics studies for the purpose of liberal education should be provided:

1. For the girl who expects to remain at home.
2. For the girl whose goal is to enter industrial, commercial, or agricultural pursuits but who will need some home economics studies as a part of her liberal education, teaching her how to live while pursuing her main occupation.
3. For the girl whose goal is the college.

Modern ideals in education demand thoughtful selection of subject matter and methods of instruction to meet the specific needs of the group of girls which is to be taught. Although there

are certain phases of work which may wisely be chosen for presentation to all these groups, and presented in a similar way to all, it is evident that the varying needs of the three groups will regulate the emphasis to be placed upon certain other phases. For example, the girl who will remain at home and the girl who will go to business or college should both have a basic knowledge of the relative nutritive values of foods and the relative wearing qualities of fabrics; but they will vary in the application of this information in their own lives. The home girl will need to know food values in order to plan meals properly; but the business girl and the college girl will be called upon to select their food from the menu card and the college table. The home girl may choose her fabrics in the piece, and hence must have more training in the making of garments; while the business girl and the college girl are likely to purchase their clothes ready-made and must have more training in the selection of ready-made clothing from the standpoint of suitability of style, line, and durability. Each must have sufficient training from both angles to solve her problems intelligently.

Fortunately, the subject of home economics is sufficiently adaptable to make it possible to handle all groups in one class when necessary; although there is much to be gained by segregation for the purpose of more specific adaptation. It is our opinion that the fundamental courses may be the same for all groups; and that differentiation may be established through subsequent courses or through a series of unit courses. The goals of the individual members of the class should determine the subject matter to be chosen and its manner of presentation.

The emphasis that has been placed upon proper grouping of girls for the work in home economics presupposes a strong advisory system in the high school. The complexities of modern life are reflected in the school life; and an adviser who has insight, vision, and broad understanding must help these girls to find that work which will best meet their specific needs.

It is sometimes argued that the spirit of democracy is threatened by the establishment of courses within one school to meet the needs of the youth in various walks of life. It is our impression that quite the reverse is true—that the close interrelation of girls whose goals are varied will give to each group an appreciа-

tion for and sympathy with the interests of all. This can be further brought about through mingling in laboratories, general assemblies, school festivals, clubs, and social gatherings.

The time allowance for home economics studies for each group will vary. The college girl, if given credit for the work by the college which she will enter, will be able to devote more time to home economics studies than if no college entrance credit is given. At least one year of required work, five periods per week, should be the minimum for all groups, with as much more as seems compatible with the varying interests.

The equipment as discussed on page 233 may be considered as adequate for the work to be given in home economics studies for *liberal education*. It may be well to stress the importance of a home atmosphere throughout the department in which this work is presented; and this is made possible by the existence of a suite of rooms, either within the school building or in the neighborhood, which may serve as the proper setting for the work in homemaking. The laboratories for individual work in foods and clothing, combined with the home kitchen or unit kitchen, will give opportunity for practice under more homelike conditions.

Close coöperation and correlation with the other subjects in the curriculum will be indispensable in the establishment of a strong program in home economics for liberal education.

1. *For the girl who expects to remain at home*

There are many girls whose school education will terminate with the high school period and who will either remain at home or will make homes of their own. For this large group the high school should offer especially rich courses in home economics in such variety and in such sequence that the student may become acquainted with all phases of home-making and those related problems that will make her a more efficient woman in her home and in her community. She should have opportunity to strengthen her ability along any line of home activity she chooses and should be encouraged to study those subjects that will give her a broader outlook upon life from the standpoint of the woman in her home.

In anticipating her program of studies it will be necessary to elect such science and art subjects as are essential to the better

understanding and appreciation of the more advanced home economics subjects. Chemistry, physics, and physiology or some other biological science should precede or parallel the work in foods and sanitation; fine arts should make a rich contribution to home art; while the social studies can do their part to establish a feeling of relationship between the girl and the world around her. Much of the work in connection with food and clothing, and the chemical and mechanical processes of cleaning, ventilation, and lighting depend for their better understanding upon the physical and natural sciences. A proper sequence of chemistry, physics, physiology, or bacteriology with relation to the home economics subjects is most essential and should be provided.

It is recommended that the first year's work be equally divided between clothing and the food problems—clothing to occupy the time during the first semester, food the second.

The clothing problems this first half-year should be of such a nature as will enable the girl to utilize the processes she has used in the grades below; to allow her to exercise her judgment in regard to materials; and to establish higher standards in regard to construction, suitability of material, and the care of her clothing. The construction of some suitable and interesting garments will give a basis for a discussion of clothing problems. Each teacher, or each class, should be allowed the freedom of choice of garments just so there is enough uniformity to permit class instruction and so the work undertaken will come within the capabilities of the class. The construction of simple outer garments makes a stronger appeal to most girls than the undergarments so generally required in high school courses of study. Modern methods of making and modern styles of garments will, of course, be chosen. The drafting of patterns should be limited, while an acquaintance with commercial patterns should be encouraged.

The work in connection with foods may well concern itself with the preparation of such dishes as are known to be possible and desirable on the tables of homes of the students represented in the group. The meal offers a good basis for work and emphasis should be placed upon wise selection and proper food combinations. Increased skill in manipulation should be encouraged as

should also independent organization of work. It is to be hoped that teachers will seek the coöperation of mothers in the community and that students will be given opportunity to repeat in their homes the lessons learned in the school laboratory. It is considered desirable that the work in foods should continue during the first semester of the second year and that in connection with the lessons in food preparation studies in food production and manufacture should be emphasized. Correct service will always be a point to consider and from time to time will receive specific consideration through special lessons when meals of different types are prepared and served to various groups.

Costume design and the construction of an entire costume, including dress and hat, furnish a good basis for work the last half of the second year, and give good opportunity to emphasize the artistic side of dress. A study of harmony of line and color, together with the suitability of these to the wearer and material used, should accompany the construction of the dress and hat. Other points in connection with the suitability of costume to the wearer and to the demands of the occasion should be considered, and good standards of dress for high school students should be appreciated and emphasized to the extent that the appearance of high school girls will be improved.

Following a year's work in each, food and clothing, the subject of the home and family may well occupy the third or fourth year. Because of the many problems that need consideration, it would be well to offer a variety of units of work in this connection, keeping in mind continually the economic and social needs of the groups and in so far as possible allowing for the working out of individual problems. Units that would naturally suggest themselves are the budget, house planning, or possibly remodeling, home decoration and furnishing, household management, cleaning problems, the servant problem, care of children and aged members of families, home care of the sick, etc. It is not intended that an exhaustive study be made of all of these problems, but it is most desirable that they be brought to the attention of the student so that she can meet them with a sympathetic appreciation and can add at least an intelligent effort to their solution.

With three years' work as a basis, and because of greater maturity of thought and interest in advanced problems, the fourth year may offer further opportunity for more intensive study along any or all lines. A course in clothing to include units, any or all of which may be elected, should be offered. Special problems to include the making of infants' or children's clothing with discussion as to requirements and needs of babies and children, may form a unit. Remodeling and renovating hats and dresses, special care of household textiles with reference to cleansing and storing, further work in garment construction, and advanced work in dressmaking and millinery may be suggested as desirable phases to be given.

Special textile study and the economics of clothing should be included in this course or in a special course. In doing advanced work in foods the subject of nutrition or dietetics should become the central thought. The selection and preparation of foods to meet physiological and economic requirements will give opportunity for repeating processes with new emphasis and will develop the ability of the girl to apply the scientific principles acquired.

As a final study for this type of student a course in sociology and economics applied to the home and family, possibly termed "Home and Social Economics" might well give a general background of the history of the home and family and give an understanding of the development of these institutions. This course might include in its organization an opportunity to recall the subject matter of previous home economics studies and to apply it to the ever-changing American home.

2. *For the girl whose goal is to enter industrial, commercial, or agricultural pursuits but who will need some home economics studies as part of her liberal education, teaching her how to live while pursuing her main occupation*

The girl who enters high school and pursues an industrial, commercial, or agricultural course, has as her goal preparation which will fit her to participate as fully as her age and ability will permit, in that particular occupation. The amount of her school time to be devoted to preparation for that occupation

should be in proportion to the amount of time she is likely to remain in school. She will, however, have a limited amount of time for other studies. Included in these should be some home economics studies as a phase of her liberal education which will enable her to judge standards of right living.

For example, there is the girl who is pursuing a commercial course in salesmanship, or stenography and typewriting, or dressmaking as a vocational industrial pursuit, or an agricultural course leading possibly to poultry raising. Such a girl needs instruction in how to live. She needs to know when only a minimum amount of money is available what foods to select and why; the best and most serviceable clothing to purchase; how to save as well as how to earn; and what amusements can be had for the little money which her division of income will permit.

As this girl can give only a minimum amount of time to this field of study, it will be necessary to give her some of this subject matter indirectly as well as directly. Probably not more than a total equivalent of five hours per week for one year could be given to this work, in a course directly devoted to home economics studies. This course will probably meet the needs of all girls in this group when it is divided into units of work which can be chosen by the girls according to their aims or goals. Thus, a girl whose goal is the vocational industrial pursuit of dressmaking would not need more sewing work for her *liberal* education but rather the other phases of home economics study, as, for example, work in food or hygiene which will teach her how to live and care for her health. The girl, on the other hand, engaged in stenography might need some instruction in both food and clothing studies in order that her standards for better living might be improved. These short units of work in a home economics course might well teach selection of food, selection of clothing, preparation of simple foods, making of shirt-waists, care of health, division of income, opportunity to help prepare the school lunch, etc.

Some of this instruction can be introduced indirectly when the time is so limited that the girl can take only short units of home economics work. This can be given through other school studies. For example, the division of income in relation to the mathematics studies; home ideals and relationships in relation to

English literature and composition; and other studies which teach one how to live in relation to hygiene and civics.

3. *For the girl whose goal is the college*

Since home economics courses have not been accepted by all colleges for entrance credit, it has not been the custom to require any home economics work in the college preparatory course, and since there are so many other subjects required, the girl has seldom had time to elect any of these studies, and consequently often enters—and frequently leaves—college, with no home economics training other than that of the elementary school.

As has been suggested above, some advanced work, at least one year, in home economics should be required of the girl preparing for college so that if no further opportunity in this field presents itself she will have had at least some basis for working out her immediate problems and for determining values in the selection of food and clothing and some appreciation of the economic problems involved in every-day living. This one-year course should come preferably in the twelfth year, as the students are then prepared to do the most serious work; but if this is not possible, it may come in any year.

It is presupposed that the pupil will have had the general home economics work of the seventh and eighth year in which knowledge of the elementary principles underlying the selection, preparation, and use of food, clothing, and shelter will have been gained and some skill in manipulation acquired.

By the time the pupils reach high school they are, in many cases, feeling the economic pressure at home and to a limited extent are sharing in the problem of the parents in regard to making the income cover expenses. For this reason it is suggested that the economic phase of home economics should be most emphasized in this year and that all the practical and theoretical work have this thought for a background.

The general problem of the cost of living may be taken as the keynote and the work organized around the various departments of the home involving expenditure—food, rent, clothing, maintenance, etc. Some definite income, representing the average of the circumstances of the students, may be chosen and apportioned according to the needs of the several necessary divisions

and expenditures—problems and projects alike looking to the solution of the big problems of the year.

Other phases beside the economic would be involved in the solution of the problems, as for instance, in food—any discussion of how to spend the funds most wisely would necessitate a knowledge of the nutritive value of foods and of balance in diet, involving dietetic training as well as economic; in clothing—the question of whether clothing should be made at home or purchased ready-made would involve a study of conditions of manufacture, child labor, and the Consumers League; managing a house would mean a discussion of the servant problem and the responsibilities of the home-maker toward those in her employ, etc.

In organizing such a course, it is suggested that a unit system be adopted, one unit being devoted to foods, another to the selection and furnishing of the house or apartment, another to clothing, etc., rather than that any two subjects should be carried on parallel. This would make for greater continuity in the course and for a better understanding and grasp of each subject by the students.

Another reason for suggesting that this course be introduced in the last year of the high school is that if any sociology or economics is required in the school it is usually placed in this year because of the greater maturity of the pupils and their ability to do serious work. There are rich opportunities for correlating the home economics studies with the social studies since so many of the home problems also involve social and civic problems, and the work of each may be strengthened and enriched by a consideration of the same subject matter from the two points of view. There will be opportunities for correlating with other subjects as well, and these should not be overlooked.

Home Economics Studies for Vocational Training

Home economics training for vocational purposes may be described as that kind of training which has for its purpose the preparation of the girl for some kind of "recognized profitable employment whether pursued for wages or otherwise." This differs from home economics studies when pursued as a part of liberal education because there is a difference in goal or a different

reason for pursuing the studies. Much more time should be devoted to the particular phase of specialization and the work should be more intensive in character. More practice and work day conditions should be provided.

There are apparently three types of vocational courses to be kept in mind in planning vocational home economics programs in high school:

1. The course which is distinctly home economics; as, for example, the vocational homemaking course.
2. The course which prepares the girl to teach home economics subjects in the one-room rural school.
3. Those courses which are the outgrowth of certain home economics studies; as, for example, vocational industrial courses in dressmaking, millinery, or catering.

In planning these programs of study it is necessary to keep in mind girls with the following aims:

1. The girl who has as her goal *vocational education in homemaking* as "practised by the wife and mother in the home."
2. The girl who is preparing in high school to be a *teacher in the one-room rural school* and must include in her program some home economics studies because she will have to teach them.
3. The girl who chooses a *vocational industrial course*—an outgrowth of a home economics study.

A strong advisory system is necessary in high school in order that the girl may choose those studies which will help her to attain her vocational goal or, as the case may be, some other goal. The high school of the future will provide for this and the girl will be conscious of the contribution of each study to her particular purpose. The relationship of the all-day vocational school or vocational course in high school, to the part-time, extension, or trade preparatory, or other courses in vocational schools of other types, should be made plain to those attending high school.

We find in the group of girls with vocational aims those who must be wage earners at the end of the high school period. The general training in home economics studies in the seventh and eighth grades should have opened up this field to the girls. Some will choose for wage earning the vocational industrial

fields growing out of these home economics studies, as, for example, dressmaking or catering. Others will plan to be teachers of all subjects, including home economics, in the one-room rural school and must be guided in the choice of studies best adapted to their aims. The girl who chooses to elect the vocational home-making course may do so because she knows she will remain at home after high school years are over. She will prepare for the all-round vocation of home-making "as practised by the wife and mother in the home" or, if she so desires, for wage earning as assistant to the home-maker.

The equipment for use in vocational work in the field of home economics should be of the kind which will be found in industrial establishments which the girls will enter, or homes represented by the girls in attendance. A businesslike atmosphere should be created and an 'in-and-out' system of practice established.

1. *Home economics studies for vocational training for the girl whose goal is distinctly home-making*

Home-making as a vocation is a more intensive occupation than home-making as an avocation. The woman in business who at the same time manages her home with the least possible expenditure of time, money, and energy, but with satisfying results, nevertheless, in home comfort and cheer, may do so with a minimum training for home-making; but the woman who makes home-making her life work should be trained intensively for her occupation.

The girl in high school who chooses the home-making course for vocational purposes may utilize her training in her own home, or she may pursue the business of home-making as an assistant to a home-maker who is willing to pay for the services of a specialist.

The program of home economics studies which should equip the girl during her high school years for the vocation of home-making would include all that should be given to the girl for liberal education as suggested in Part I, page 125, March RECORD, and added to this and intensifying it there should be very strong training in the principles underlying the activities and responsibilities connected with the home. Provision should be

made for relating practice closely with the theory; and opportunity provided for repetition of processes especially during the upper years in order to develop skill and power in home-making.

It is suggested that the first two years of the course for vocational home-making simply intensify the work given during the first two years of the course "for the girl who expects to remain at home;" and that during the third and fourth years more time be given to the working out of specific problems which, when completed, will render the girl independent in her vocation.

And it is further suggested that during the first two years ten periods per week be devoted to the home economics studies; and that during the last two years from one-half to three-fifths of the school time be devoted to this special training. According to the provisions of the Smith-Hughes Act, one-half of the time must be devoted to the home-making studies.

With the basis in food and clothing in the first two years, the work of the third year may embrace the problems of home management, including the selection of the home; household accounts; care of infants and children; special practice in the selection and care of household furnishings and finishings; planning of work; hygiene and sanitation in relation to the home; and domestic service and home ideals. This work should be made as practical as possible; and it is suggested that it may be made so by planning:

(*a*) For special work, whereby the girls are given practice, with or without remuneration, in well-ordered homes, for which school credit is given. Such a system has been in successful operation for several years in some places.

(*b*) For practice in a school practice-house, the girls taking turn about in managing and operating the house under careful supervision.

(*c*) For practice in the girls' own homes under supervision, credit given in school.

(*d*) For short terms of intensive practice work during the vacation following the third year of school work. (This would necessitate a very careful system of placement, in order that the proper environment and experience be gained.)

The fourth year of work should include a careful study of the principles of dietetics, based upon the science work presented

during the first three years; and developing into a short but intensive course in menu planning and the serving of informal and formal meals. The serving of refreshments, combined with simple ideas of home entertainment, may well be introduced at this point. A course in business methods as related to the home —banking, legal proceedings, buying, renting, mortgages, insurance, etc.—should be given at some time during this year, as part of or parallel to the course.

Some work in dressmaking based upon a course in costume design might well form a part of this course; with a special problem in the clothing of the family.

At some time during the course, preferably during the third year, opportunity should be offered the girl to study the advantages and disadvantages of the various types of positions open to girls trained in this field of work. Women of experience in the field of home-making may be invited to speak before the girls; and visits to well-ordered homes and institutions where professional home-makers are employed will make the future more concrete. An interest awakened at this time might lead to future training for administrative positions in homes and institutions.

In order to support the course properly, the other subjects in the curriculum must not only contribute to it but must also broaden the vision and interest of the girl in other subjects. It is suggested that the academic work for this girl be chosen with a threefold aim:

(*a*) The enrichment of her life with a view to creating an intelligent mental and spiritual environment, and a basis for judging values.
(*b*) The establishment of a basis for the wise employment of leisure time.
(*c*) The creation of a "setting" for the home, as a constructive factor in the world's activities and interests.

2. *For the girl who takes the normal training course in high school and will teach home economics as part of her regular work*

In view of the fact that many teachers in rural and small town communities enter the teaching field immediately after graduation from high school, and that there is a growing demand for

home economics as part of the regular grade work, it is necessary to provide for such students a normal training course during the upper years of the high school. In order to indicate the importance of such a course, the following extract is quoted from a report issued by Mr. Albert M. Deyoe, superintendent of public instruction in the state of Iowa:

> An important matter is that the purpose for which the high school normal training course was established be thoroughly understood. The course is not designed to take the place of normal schools nor to make attendance upon normal schools unnecessary. But it is established for the benefit of those high school students who expect to go directly from the high school as students to the rural schools as teachers. The rural school as at present organized with its one-room building, must of necessity depend upon the high school for its supply of teachers. At the present time over 80 per cent of the teachers in the rural schools of Iowa come directly from the high schools of the state, though not all of them who come from the high schools are high school graduates. In fact, few over one-half of them have had four years of high school work. This being true, the normal training high school will furnish training to those who otherwise would receive none. It ought to induce a larger number to first complete the high school course before attempting to teach a rural school, and it will also give to those who pursue the course an opportunity to pursue a course better adapted to meet their needs as teachers of a rural school than is provided by the regular high school courses. We believe that it will also stimulate a desire for more extended preparation later in the higher institutions of learning.
>
> Agriculture and domestic economy will, to a degree, at least, be taught in all rural schools. . . .
>
> It is quite essential, then, that instruction in the principles of home economics and elementary agriculture should be provided for in such high schools as maintain a Normal Course for the preparation of teachers for the rural schools.

Such a course in home economics may be presented in one-half year of four ninety-minute periods and one forty-five minute period per week, preferably after work in home economics in previous years. The course may be given in the third or fourth year; but it should either parallel or follow the courses in science and art which contribute to it.

The plan for the course as presented to the high school normal training class should be organized upon the same general basis

which they, as teachers, will use in their own class rooms. The work may have its beginnings in the needs of the school room, sanitation, decoration, etc., and in the hot soup or cocoa which may be served as an accompaniment to the box luncheon brought from home, and in the Friday afternoon refreshments which may be served to parents and school trustees.

Growing out of these very tangible interests the fundamental working principles in food, clothing, shelter, and right living as related to the lives of the children to be taught may be woven into a well-unified course of home economics. It seems desirable that the students in the normal training class be allowed to share with the teacher in the organization of their own course, in order that they may understand the possibilities of organization and the reasons for the sequence as presented.

In addition to teaching the students the manipulative processes and scientific and art principles in relation to the various phases of home economics, each lesson must also include definite instruction in the best methods of presenting this material to the children to be taught later; for example, in the study of foods, in the lessons on bread making the methods of mixing, handling, and baking bread will be taught with the scientific basis for each step; and in addition to this a discussion of the best ways of teaching these lessons under conditions such as the students will find when they go out as teachers. In the study of textiles and sewing and in the lessons on the making of curtains for the school windows, with the discussion of materials most suitable for them, the cost, etc., the normal training class will also study the best methods to be employed in presenting this material to a class of children in a one-room rural school. The forty-five minute period may wisely be devoted to the discussion of methods of teaching the lessons presented in the laboratory during the week; and it is highly desirable that classes of children be taught by the teacher for the observation of the students, and by the students for the criticism of the teacher. A typical class room should serve as the laboratory for this work.

It would seem desirable that a typical rural school room serve occasionally as the laboratory for the teaching of these lessons to the high school students as well as to the groups of children in order that they may keep their problems well in mind; al-

though in order to give each student the best opportunity to gain skill in the manipulative processes, the laboratory equipped for individual work is necessary.

It is urged that a fundamental idea of the industrial arts as outlined in Part I, "Work in Grades 1–6," be presented to the students in the normal training class in high school, either as a part of the home economics course or, perhaps more wisely, as a part of a course in methods of teaching in elementary schools.

The normal training course in home economics should be taught in such a way as:

(*a*) To indicate the scope of the subject matter without loss of thoroughness in the teaching of fundamental principles.

(*b*) To enable the student to select from the types of material presented the theory and practice best adapted to the needs of the children to be taught.

(*c*) To show the importance of unifying rather than differentiating the various phases of home economics.

(*d*) To emphasize the opportunities for correlation with other subjects in the curriculum and with the interests of the homes and the communities.

(*e*) To show the students the value of live problems as the basis for organizing the course.

3. *For the girl who will pursue vocational industrial occupations growing out of home economics studies*

Growing out of the general home economics studies are certain vocational industrial pursuits which, though not strictly home economics, are so closely related to it by reason of the subject matter and materials handled, that they are sometimes considered as coming under the jurisdiction of the home economics department.

These pursuits may be the outgrowth of the clothing and textile courses, such as dressmaking or millinery, or of the food study, as catering or tea room assisting, or some form of specialized food work, as candy making, or of some other home economics subject, as laundering, etc.

This specialized study should not begin before the junior year of high school and during the first two years opportunities should be given the students to try out a number of different lines of

work before deciding upon their specialty so as to give them a view of some of the various opportunities and to make it reasonably sure that the work chosen is the best suited to the needs and capabilities of each particular student. The first year course should be general as far as the special subjects are concerned, practically a continuation of the eighth year work, such a course as is recommended for "Liberal education for the girl whose goal is commercial pursuits," Part II, Section II, page 245, above. The remainder of the time should be devoted to other subjects that will be necessary for the girl, no matter what vocational subject she chooses—commercial arithmetic, business customs, language, music, etc. In the second year it is recommended that the work be organized in unit courses, each course being intensive and duplicating as far as possible trade conditions, such as repetition of processes for skill, speed, quality of workmanship, and hours of work; and that each pupil be required to take a unit representing each of the various vocations offered for specialization during the last two years so that in this way she will have opportunity to try each under trade conditions.

The time to be devoted to the practical subjects in the first year would probably not exceed the usual five hours per week recommended for liberal education, but in the later years sufficient time should be devoted to specialized study. The equipment should duplicate that to be found in any well-equipped workroom representative of each of the several industries—power machines for dressmaking, steam tables and hotel ranges for cooking, power washing machines, and electric irons for the laundry, etc.

Until recently there have been greater opportunities for girls in the fields of clothing than in that of foods, for high school girls have been considered too immature to undertake lunch room work or catering. However, the increasing number of small tea rooms and catering establishments has created a demand for trained assistants to tea room and lunch room managers and caterers; and high school girls can be fitted for such positions. At times a decided taste and talent for some specialized form of food work is discovered, such as candy making, jelly making, or canning fruit, and the student may be helped to develop this particular interest.

For any of these types of occupations a strong basis in science is desirable, but it should be the science applied directly to the materials the pupils are using and to the needs of the industry they are studying. A knowledge of marketing and buying, the nutritive value of foods, the balanced menu, and other phases of dietetics, should form a part of the program for the girl whose occupation will grow out of the work in foods. Quantities prepared should be such as would be practicable in establishments of the type studied, and skill, accuracy, and speed should be acquired.

Fine laundry work, such as the laundering of fine shirt-waists, lingerie of all kinds, laces and embroideries offers another field of vocational industrial opportunity that may be developed for this young girl. With very little equipment this occupation could be carried on in the girl's own home, a decided advantage oftentimes.

For the girl whose interest in sewing, textile study, and art has created a desire to become a seamstress or a dressmaker, intensive work in sewing and dressmaking should be offered. During the two years it is possible and necessary to give rather a wide variety of training to familiarize the student with the possibilities of this trade, and to give sufficient time and opportunity to repeat processes so that skill and speed may be acquired. Designing, drafting, cutting, fitting, draping, and sewing must all be included. Hand work such as may be required in construction and decoration should find a place in this course. A study of the various possibilities in the trade should be made and the student should be familiarized with shop conditions. Strong art courses should parallel this course so that skill in designing costumes may be acquired.

Art needlework, embroidery, crocheting, and knitting are special phases in this field that have proved profitable to many. A clever person who anticipates the needs and whims of fashion and fancy is well paid for her originality and skill. Gift shops in cities and in summer places give ready sale for good work. This type of needlework may be combined with tea-room work and the two prove a source of good income.

Millinery is another field of vocational industrial interest that is proving attractive to many. To be successful, a combination

of art and skill is desirable and almost necessary. Any course of study would change with the season and would of necessity adapt itself to the prevailing styles. The making and trimming of hats include many mechanical processes and good technique is required, but neither avails unless an artistic hand contributes to the results.

Some of these vocational courses are practicable only in the large city high schools, but adaptations can be made to meet local situations.

For all of these courses business management and business method should be taught. Opportunities for practice should be furnished during a part of the course in the school laboratories but during the last year other opportunities outside the school room in actual establishments should be provided, as in the in-and-out system approved by the best vocational schools of to-day.

The greatest problem in establishing vocational industrial courses is to find the proper teacher. It is difficult to find one who is equipped with the necessary practical experience and who at the same time has sound educational principles to guide her in the teaching of her subject and her pupils. "Whether it would be better to put a trained teacher into a shop or lunchroom, or a woman with practical experience into a training school is an open question, and so, as always, we turn to the ideal teacher as the only solution of the problem before us. Home economics will not have its full vocational value until the teacher has a scientific foundation, practical efficiency, and good teaching method, and is heartily supported by the school boards of the land."

(*To be concluded in the September number*)

CIVIC EFFICIENCY AND ELEMENTARY STUDIES

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One of the definite objectives of elementary school instruction is the development of an experience in the pupil that will be nothing less than the experience adequate for active and intelligent performance of the specific duties of citizenship. This aim has been advanced and reiterated with such force of lung and ubiquity of type that we have in many cases come to think that this is not only what the public school is for, but what it is accomplishing with signal success. And it must be admitted that there is some truth in the confident exaggeration of the gains in civic spirit and intelligence derived by the pupil from the traditional curriculum. The possession of a common national tradition as acquired from a study of school history, the knowledge of the geography of the United States and of the world as given in the elementary schools, and the knowledge of the organization of our state and national governments as taught in school civics, are of prime importance in organizing for future citizens a core of common experience. Without this common experience the American nation, consisting as it does of such varied conditions of living and such differences of racial stock distributed over so widely separated sections of territory, could not long exist.

A savage conqueror or an imperial tyrant can exact tribute and personal service from diverse populations over even larger territories than those embraced within the boundaries of the United States without the necessity of any knowledge whatever on the part of his millions of subjects beyond their immediate experiences and hearsay—and the one expensive bit of knowledge that they have to serve or pay when called upon to do so by the distant conqueror. But the very essence of effective democratic

government is knowledge on the part of all concerning the various territorial and population elements that make up the nation. Much of the geographical information that we possess we have acquired through the exigencies of travel or business or general curiosity about world doings, and by means of railroad time-cards, daily newspapers and periodicals; but without it, acquired by whatever means, whether in school or out, *we could not be a nation, much less persist as one.* The isolation of the United States has, until comparatively recently, made a knowledge of foreign lands less a matter of importance for citizenship than a means to general culture, but now that this country has definitely become a world power, the obligation of each citizen to be intelligent concerning the geographical foundations of the aspirations and policies of other nations becomes practical and pressing.

The geography taught in the elementary schools has largely consisted of locational studies—the positions of the states, the location of the principal cities, mountain ranges, lakes, rivers, plains, and coastal indentations, together with some attention to climatic conditions and a very limited consideration of the influence of climate, topography, and natural resources upon the occupations and ways of living of mankind. These very elementary beginnings of "earth knowledge" are necessary in the experience of men and women who are called on to elect representatives who will legislate upon problems of tariff, transportation, labor, banking, and so forth; but the teaching of geography hitherto in the majority of schools has not brought the results in civic intelligence that are desired and to be expected, because the emphasis has all too frequently been laid upon the formal memorizing of comparatively isolated facts, with little attempt to organize a thoughtful and thinking geographical experience as it operates in the conditions of everyday commercial, industrial, and political life. The best current practice in the teaching of geography has departed a long way from the type of years ago. Questions are now being put to earth science that arise out of curiosity concerning industrial and political movements, and answers are being found that furnish important accessions to the intelligence of the pupil regarding matters of first-rate civic importance. The better type of geographical studies places the

learner in a living social situation and gives him knowledge that is of help in understanding conditions as they exist.

The old informational type of geography teaching was worth while, but the new type is ever so much more worth while. The former in a general way furnished the skeleton of information that at least supplied the external setting of civic problems; the latter supplies an intimate knowledge of the facts out of which social judgments may be made and also gives practice in the passing of judgment on social matters. The newer conception of geography as taught in elementary schools enhances its own dignity as a subject of instruction and points the way to its usefulness for the high school and even the college in more extended and intimate studies of the movements of trade, the aspirations of nations, and the problems of government. As an example in point, the causes of the present great war are largely geographical in the wider meaning of the term, and the conditions of world-peace are to be largely geographical as well. A very important concern for each citizen at present is the solution of international problems and the development of a lasting peace. In order to be intelligent regarding this fundamental matter it is necessary that we should have learned extensively of the geographical conditions that underlie both the causes of the war and the possibilities of peace. Such knowledge is essential to the intelligence of the citizen if his point of view is to be sufficiently broad and well-informed to make him capable of a judgment on national policies. It should be not only the exercise of immature minds in the elementary school, but should be carried on through the high school and the college and receive treatment adequate to its uses and consistent with the needs of mature mental development.

A second immediate objective of education for citizenship is a knowledge and appreciation of the fundamental laws and constitutions under which we live. This fact has been recognized in the inclusion of *civics* in the curriculum of almost every elementary or high school in this country. The subject is recognized also in its inclusion among the subjects of college instruction and university research under other names. The earlier teaching of civics or civil government in elementary and high schools was of a formal nature, consisting in some cases of little more than

an analytical study of the constitutions of the states and the nation and almost completely omitting the dynamic aspects of government. Elementary civics has changed in great part to include a study of the 'good works' of citizenship, with large emphasis on the obligations of the citizen to make his community sanitary, efficient, and attractive in appearance. The subjects of good roads, clean alleys, adequate transportation facilities, sanitary and fair markets, and good schools represent the selection of topics with which the newer texts in civics deal, together with attention to forms of government and others of the larger problems of political and industrial life.

The study of history has had a large place in our faith in the ability of the schools to do something to improve the efficiency and the devotedness of the citizen. A sane view of the current teaching of history causes one to doubt whether our confident faith has been justified. Is it too much to say that the study of American history as conducted in elementary and high schools has in its general effect given us only a hazy knowledge of successive conditions of fact, tied up with so many meaningless (and in their connection useless) dates, that is of little importance in enabling one to see the light in the midst of the bewildering complexity of contemporary social and economic life, and has implanted in us an attitude of partisanship and insularity that ill prepares us for our pressing international relationships and obligations? Obviously history is not to be a memoriter learning of lists of dates, dynasties, moves in military campaigns, and successive presidents, vice-presidents, and secretaries of state. Such instruction at its best cannot be expected to give more than a skeleton of the real materials of historical study. As a school subject history must be a thoughtful, cause and effect study of a developing social situation in which economic, intellectual, and political conditions in their interplay with human motives furnish suitable material for analysis, comparison, and judgment and, in larger measure than is at present the case, for application to current affairs.

To be sure, there are other uses in the study of history beyond its application to the intelligent performance of one's duties as a citizen. The imposing literature of history is a monument to the

intellectual powers of man engaged in trying to find out the truth about any set of social problems whether or not of immediate significance to any present civic concern whatever. But in a discussion of the study of history, not as a pursuit of leisure time, but as the means to better citizenship, it is necessary to point out that there are at least two possible uses of history, namely, for 'high-grade play' and for utility. Omitting the former for the present, we may well ask ourselves what are the method and the extent of the functioning of history in civic life. Many answers have been given to this question, but the soundest of them all seems to be that history presents an opportunity for studying in simpler form and freed from the complexity of current motives, social situations as they have existed in the past and for the development of skill, technique, and judgment in the solution of social problems. Add to this the influence of such an object of historical studies upon the direction of attention and the selection of historical materials and we have a type of social study that bids fair to be of large value. If history is to be studied with a view to its practical usefulness, it must take its departure largely from the problems of the present and furnish the materials necessary for sound judgments concerning those problems. Its core will necessarily be a desire to understand current events through a knowledge of the social forces that have brought them about. To be most useful—not most satisfying necessarily as a pursuit of leisure, but of greatest utility in making a citizen intelligent about problems of citizenship—historical studies must take their point of departure from the present and lead back into the past only as the past is worth while in answering the questions which present need would put to it.

Much as one may so wish, he cannot be a good citizen if he be ignorant of the new knowledge that has come to us of the cause and conditions of disease. The farmer, the merchant, the manufacturer, the buyer, the renter, the owner of property, the user of public utilities, the citizen who votes upon a question involving public health and welfare, are unable to live up even to their high aspirations of public morality unless they know the fundamental facts of bacteriology, physiology, and hygiene. The farmer who maintains a source of disease bacteria which are carried to the city in the milk which he sells, fails through his

ignorance, quite independently of his intention, to be a good citizen. The same is true of the merchant who maintains a filthy store, of the housewife who is careless in her disposal of garbage, of the mother who is unable to safeguard the health of her family, of the carrier who neglects the conditions of cleanliness, of the owner of property who perpetuates unsanitary conditions, and of the voter who fails to erect about his family and about the welfare of all, proper safeguards of construction and inspection of public utilities. Intelligence concerning the conditions of health and the causes of disease ought to be made a part of the equipment of every citizen and of every prospective citizen.

We have not customarily thought and spoken of arithmetic as a subject that has any bearing on the specific problem of civic education, but there is strong reason to believe that no subject has more fundamental importance than arithmetic in the forward-looking program of American life. In the last analysis, most of the problems of public policy deal with the raising and expenditure of money or affect the stability of the economic situation. Government is not only a matter of honesty and good intention, but of cold calculation as well. Bonded indebtedness, control, or ownership of public utilities, the tariff, taxation, currency, and banking are only a few of the problems which every citizen must either settle intelligently or else fudge on. In many communities progress is blocked by a failure to understand the meaning of the bonding operation and through a general distrust of other business methods that are not understood. In other communities a wave of popular prejudice, ignorant of the true financial situation, may overthrow the very sources of that community's prosperity. National policies depending on sound addition and subtraction are settled at the polls by the voter's general preference for money in his pocket and a full dinner pail. Thus we might multiply instances of the fact that our intelligent participation in government depends upon a knowledge of the quantitative factors involved in that government.

"But what," may be asked, "can you do about it? The pupils in the elementary school cannot be made to understand such matters." The answer is that to a very much greater extent than has hitherto been represented in elementary school practice they can be made to understand them. The organization of the

stock company, the process of bonding, the problems of taxation, the plain arithmetic involved in the theory of tariff-making, quantitatively illustrated principles of sound banking and commercial credit, and many other matters of like importance can be made simple enough for the pupil in the upper elementary grades to understand them. They can be made comprehensible because they have been made and are daily being made comprehensible to ordinary pupils by extraordinary teachers. The practice can be extended.

An additional objection may be raised that these are not problems of arithmetic, but problems of the social sciences. It is said that they should be taught by the teacher of social sciences. So it is decided—and the teacher of the social sciences passes these problems by with vague, theoretical discussion because they are arithmetic. Let us not cavil over the point as to whether they are problems of arithmetic or of social science. They may be treated as social applications of arithmetic or as arithmetical problems in social science classes; but let us make definite arrangements somewhere in the elementary curriculum for as thoroughgoing treatment as may be of that large range of social-economic problems that are, in the last analysis, quantitative in nature and that require the exact methods of mathematics.

In the discussion of the place of geography in democratic education as given in an earlier paragraph, it was shown that the newer tendencies in the teaching of that subject are to emphasize very strongly the influence of geographical conditions upon the economic, political, and social life of man. At the risk of repetition it seems desirable to present an additional body of materials of education, to a certain extent overlapping that of geography, history, and civics, which ought to find place in the elementary school, namely, knowledge of the interrelationships and the interdependencies, the relative services and rewards, of the industrial worker, the industrial manager, the middleman, the banker, and the investor of capital. The necessity for including such materials seems to be justified by a mere statement of the situation. For nine-tenths of the children who will become voters in this country, the only school education they will ever receive will be that of the elementary grades. They will be called upon

to vote upon questions involving economic and sociological principles of supreme importance, and they will play their active part in the great struggle for economic advantage or economic existence. Sometimes the method of struggle will be the strike and the lock-out, sometimes the ballot.

The great failure of the most of us—college graduates and college instructors included—in the face of the necessity of forming an opinion and following a course of action regarding a social or economic controversy, is that we are too ignorant of the facts involved and of the motives working at cross purposes to make an intelligent decision or to follow a course of action consistently and vigorously. To know the job of the man and the woman who work with their hands, who guide tools, control machines, to form crude stuff into beautiful and useful commodities; to know something about the risks they run, the occupational diseases from which they suffer, the narrowing, mechanical quality of the work of some, and the truly fine and excellent quality, involving, as it does, the use of science and art and the control of titanic forces of mighty machines, that goes with the work of others; to know the wages men and women receive for their day's work and the scale of living which those wages will purchase; to know where women and children work and how long and with what effects upon their health and their morals—these are not facts which one may know or be ignorant of as he chooses, but facts that he is ignorant of at the expense of intelligent and sympathetic citizenship.

No less important is it that the industrial worker should know the life of the farmer and his contribution to welfare and happiness. Without the farmer's labor, the man in the city could not live. That is a simple statement and hardly worthy, at first sight, of a place in print because it is so obvious and so trite. But those are words that should be written in letters of light so brilliant and so unescapable that the sentiment they express should become a part of the working conscience of every man who lives off the bounty of the soil and the labor of the farmer.

In our emphasis on the necessity of being informed about the day's work of the industrial worker and the farmer, there must be no neglect of the day's work of the banker, the industrial manager, the scientist, the merchant, and the jobber and dis-

tributor (for even the middleman has his useful part in the social structure). Let us not forget to impress the fact that there is a risk in the day's work of the merchant and the banker and that every industrial enterprise that gives work and wages to the employee is a high adventure for the man who interests capital in its organization and attempts to pay dividends on the capital invested.

Thus we might develop the theme at great length, but always there would be the fundamental consideration of valuable work done for your comfort and mine, by men and women like you and me, who are likewise in need of what you and I and other millions are contributing out of our day's work, our economic self-denial, our ability to do with our hands, to do with our minds, to handle a shovel, to pull a throttle, to risk the purchase of a bill of goods, to plan the details of a manufacturing project, or to provide the financial sinews for our gigantic, complex, bewildering, and treacherous industrial organization. These experiences must be brought down into the small for the comprehension of the boys and girls of the upper grades of the elementary school, and carried on through the high school and into the college and the university for those who continue into these higher stages of education.

What we have been saying in these pages is that there are certain fundamental social attitudes and a large body of social knowledge that ought to be a part of the equipment of every child that leaves the elementary school. A rough analysis of these social-economic materials shows us as teaching certain phases of them under the names of arithmetic, geography, history, civics, hygiene, and information concerning occupations and industries. In the social situations to be studied there is much overlapping of these various phases, and in the elementary school it will be desirable to preserve the living unity of the situation as far as possible, dealing with the problems in very concrete and untechnical terms. It is, perhaps, easier to think of these social sciences as subjects of college instruction and to get from the college curriculum the sense of this body of social material the study of which should be begun in the simple, little differentiated experiences of the elementary school and carried up, with increasing demands upon knowledge and judgment, through the high school

to the university. But however simple the beginning and however intricate its final formulation, it is this body of social knowledge that is the indispensable source of intelligent and conscientious democratic government. Any system of education in a democracy which omits it has made only a very limited beginning in the attainment of its object.

LIVING ON TWENTY-FIVE CENTS A DAY

By MARY S. ROSE, Assistant Professor; MARY G. McCORMICK, Instructor; and MARION F. WALKER, Graduate Student of the Department of Household Arts Education, Teachers College

During the month of January, 1917, the department of nutrition of Teachers College coöperated with the Life Extension Institute and the police department of New York City in a demonstration of the way in which an adequate and satisfying diet may be secured at a cost of 25c a day per person.

Low-priced menus may differ greatly in the degree to which they fulfill nutrition requirements, but foods have to be chosen with much discrimination to insure complete nutrition when the margin of cost is very narrow. It was thought that the participation of twelve men from the New York Police Training School in a three weeks' actual trial of menus scientifically arranged would show whether these could be made sufficiently palatable to sustain appetite, in view of an inevitable narrow range in choice of food materials, and that reports from such a demonstration would be useful to the housewife struggling with the problem of the rising cost of living. To reproduce as fully as possible actual home conditions, all the food materials were purchased as required in the local retail stores at local retail prices.

The men who formed the Diet Squad promised faithfully to refrain from eating elsewhere than at the diet table. There is every reason to think that this promise was well kept since their coöperation was hearty throughout.

The menus and recipes have already been published by the Life Extension Institute in a bulletin entitled *Food—What to Buy. How to Cook it. How to Eat it.* Since these menus were planned for full-grown men, and need modification if used for children, this earlier bulletin contains also some of these menus adapted to the needs of a family including young children.

It is the purpose of this present paper:

1. To discuss the experiment from the standpoint of the nutritive values of the foods used and to demonstrate that the

foods which were provided contained sufficient energy, protein, calcium, phosphorus, and iron to meet the requirements of the men.

2. (*a*) To determine which foods furnished the greatest amounts of energy, protein, calcium, phosphorus, and iron, and to compare them with their costs. (*b*) To try to express a composite valuation for each class of foods which will give due recognition to each of the above-mentioned constituents; and by comparing the composite valuation of any class of foods with its cost, to determine the foods which give the highest nutritive return for the money expended.

1. *The nutritive values of the foods used in the experiment. Method of calculation.* The foods were weighed as purchased. Their nutritive constituents were calculated from tables in Rose's *Laboratory Manual of Dietetics.* These quantities included those served to the Diet Squad and to a small number of daily guests and servants since it was not practical to prepare the food for the Diet Squad separately from that for the guests and the help.

The quantities of food used in each recipe were separately weighed and the calories, grams of protein, and cost were calculated for the recipe as a whole and for each individual serving. By keeping a record of the number of servings which went to the diet table, the daily food consumption of the squad was known. Below are given the amounts of nutrients in the average daily food intake of the Diet Squad, and the amounts generally accepted as representing the daily requirement of an adult with moderately active work.

	Calories Total	*Protein Grams*	*Calcium as Ca O Grams*	*Phosphorus as $P_2 O_5$ Grams*	*Iron Grams*
Requirement	3,000	60–80	0.7–1.0	2.75–3.5	0.012–0.015
Consumption of the Diet Squad	3,933	96.5	1.03	3.75	.0197

Since the men in the Police Training School carried on heavy gymnastic exercises, their energy requirement would probably be 3,500–3,700 calories. Thus the diet served was adequate in energy, protein, calcium, phosphorus, and iron.

2. (*a*) *To determine which foods furnished the greatest amounts of energy, protein, calcium, phosphorus, and iron,* the foods were grouped as follows:

Beef, veal, lamb, pork	Grain products
Fish	Sugars and sweets
Eggs	Vegetables
Fats (nut margarine and suet)	Fruits and nuts
Milk and cream	Miscellaneous
Cheese	

(*A complete list of foods grouped under the headings listed above with the total amounts used will be found at the end of this paper.*)

The calories, protein, calcium, phosphorus, and iron for each group were worked out. The totals were calculated, as well as the percentage of totals which each group contributed. In the same way the cost of each group was added to make the total cost, and then the percentage of cost for each group was determined. This demonstrates in a convincing manner which class of foods was the least expensive in regard to any one of the nutritive properties. Thus, the meats are seen to be very expensive sources of energy, as they yield only 5.7 per cent of the total calories, while their cost is 11.07 per cent of the total cost. Grain products, on the other hand, yield 41.38 per cent of the total calories, while their cost is only 27.51 per cent of the total cost. Again, the grains yield 61.12 per cent of the total iron, while the meat yields only 11.51 per cent.

The least expensive sources of energy in the order of their cheapness were:

Sugars and sweets	Grains
Fats (This would not have been the case if pure butter had been used.)	

The least expensive sources of protein were:

Grains	Milk
Beef	Vegetables
Cheese	

The least expensive sources of calcium were:

Milk	Vegetables
Cheese	

The least expensive sources of phosphorus were:

Cheese	Milk
Grains	Vegetables

The least expensive sources of iron were:

Grains	Meats
Vegetables	Fruits and Nuts

Thus the grains were inexpensive sources of energy, protein, phosphorus, and iron. Milk and cheese were both inexpensive sources of protein, calcium, and phosphorus. The vegetables were inexpensive sources of protein (due to the large amounts of dried peas and beans used), calcium, phosphorus, and iron.

2. (*b*) *The composite valuation*[1] is an attempt to express with one number the relative value of a food when its various nutritive properties are considered. It was decided to use a scale of ten, and since an adequate supply of energy is so essential to an economical utilization of all the other constituents of food, to give a weight of six to the percentage of calories yielded, and a weight of one to the percentages of the other nutrients. Dividing the sum thus obtained by ten will give the weighted average. The composite valuation of grain products may be calculated thus:[2]

41.38 (Per cent calories yielded by grains)
6

248.28
54.82 (Per cent protein yielded by grains)
19.71 (Per cent calcium yielded by grains)
50.40 (Per cent phosphorus yielded by grains)
61.12 (Per cent iron yielded by grains)

10)434.33

43.43

(Our present knowledge of 'vitamines' hardly justifies us in attaching a numerical value to them.)

[1] This method originated with Professor Henry C. Sherman, of Columbia University, and has been in use for some years in his laboratories. A detailed description of it may be found in *The Adequacy and Economy of Some City Dietaries*, by Sherman & Gillett.

[2] See table at the end of this article.

By this method it is found that grains, sugars, fats, milk, and vegetables have the highest composite valuation.

When the composite valuation is divided by the percentage of cost, the foods making the largest nutritive returns for the money expended, stand out clearly. Thus cereals, milk, cheese, and sugars seem to be the most economical foods. Vegetables also have a high ratio. It may be noted that fruits and nuts have practically as high a ratio as meat; fish and eggs have the lowest ratio.

CHOICE OF FOODS FOR MINERAL MATTER

A diet may be adequate in calories and protein and yet be quite inadequate in the ash constituents. It was necessary, therefore, to select from the limited number of low-cost foods, those which were rich in mineral matter. An intimate knowledge of such foods is quite essential in making low-cost dietaries. The average city diet is more apt to be deficient in calcium than in phosphorus or iron. Milk is the most practical source of calcium and must be freely supplied if the calcium requirement is met. In this dietary, one and one-half cups per capita were the daily consumption. The calcium was still further increased by the dried peas and beans which are rich in this element. More than half of the phosphorus and iron was furnished by the grain products. However, these elements would have been present in much smaller amounts if the highly milled grain products had been used. Since eggs, fruits, and vegetables were too expensive to be used freely it was especially important to select the grain products with great care, and accordingly whole grain products were used as much as possible. Whole wheat bread was used at least once a day, and rye bread was served several times during the experiment. When white flour was used to make bread, it was generally combined with some food high in ash constituents, so that its low mineral content might be augmented. Thus, currant bread, currant buns, raisin bread, date bread, and oatmeal bread appear frequently in the menus. Oatmeal was served as breakfast cereal eleven times in the three weeks. Next to the milk and grain products come the vegetables as important sources of mineral matter. The small sum of money available limited the choice of vegetables to the

cheaper and coarser varieties; consequently dried peas and beans were large contributors to the nutrients of this class. In the same way, only the cheaper fresh fruits could be purchased, and the dried varieties had to bear the greater part of the burden of providing the ash constituents of the fruits.

Meat or fish was used on all but two days, January 16 and January 27, and even on the latter day, salt pork was served with baked beans. On no one day was meat or fish served twice, though on one Sunday, rolled steak was served for dinner, and creamed oysters on toast for supper. Only the cheap varieties of meat or fish were purchased. However, it was thought advisable to provide meat about once a day, since the men had been accustomed to a high meat diet, and it would not have been reasonable to expect them to change their dietary habits in this respect too suddenly. Tea and coffee were, likewise, concessions to previous habits. However, vegetables and fruits could have been served more freely and in greater variety if meat had been used less frequently.

The foods were appetizing in appearance and were well relished by the men. Second helpings were very frequently called for and given. Though unusual combinations of food were, in general, avoided, there were one or two innovations. For example, the dish that was the widest departure from the ordinary was scalloped onions and peanuts. Though two men returned their portions and asked to have bread instead, nevertheless six extra servings were requested by the group.

No pure butter was used. The butter substitute employed was a mixture of peanut oil and cocoanut oil, and was very satisfactory.

Since highly flavored foods are generally expensive, and low-cost foods often devoid of pronounced flavor, it is frequently necessary, in inexpensive dietaries, to add flavor directly to the food by the use of spices. Cinnamon, cloves, ginger, mustard, nutmeg, sage, and vanilla may thus play an important part in making low-cost foods acceptable.

In this dietary, which furnished sufficient energy, protein, calcium, phosphorus, and iron for the men, and which was satisfactory in flavor and appearance, about thirty-six per cent of the total cost was spent for grain products and sugars. Prac-

tically as much was spent for milk as for meat, and more was spent for fruits and vegetables than for meat and fish.

The complete list of food materials, together with the quantities used, was as follows:

Meats	*Pounds*
Beef	
Chuck	15¾
Corned	9½
Hamburger	12
Heart	7¼
Shoulder	5
Liver	3
Lamb neck	4
Pork	
Bacon	3½
Butt	4¼
Kidney	5
Salt pork	3
Sausage	4½
Shoulder	4½
Veal neck	2½
Fish	
Codfish fresh	2
Codfish salt	1
Haddock	9
Oysters	2¼
Salmon canned	2
Eggs	1⅓
Fats	
Nut margarine	47
Suet	31¼
Milk	
Condensed sweet	14/16
Whole	158
Cream	15/16
Cheese, American	3 6/10

Grains	*Pounds*
Barley	2½
Bread, Boston brown	18
Bread, graham	98¾
Bread, rolls	19 11/16
Bread, rye	11
Bread, white	46
Cornmeal	15½
Cornstarch	2¾
Chocolate	11/32
Crackers	1
Hominy	21¾
Macaroni	4½
Rice, broken	13 13/16
Samp	5½
Spagetti	5
Oatmeal, rolled	27
Tapioca	2½
Sugars and sweets	
Sugar, brown	14 10/16
Sugar, granulated	113¼
Molasses	7 12/16
Vegetables	
Dried lima beans	6
Dried kidney beans	2½
Dried white beans	13¾
Beets	5
Cabbage	3½
Carrots	21½
Corn, canned	1½
Onions	15
Parsnips	7
Peas, canned	2 6/16
Peas, split yellow	9½
Potatoes, sweet	5

	Pounds
Potatoes, white	68
Tomatoes, canned	14 7/16
Turnips	9
Peppers, green	1 10/16
Fruits and nuts	
Apples, dried	7½
Apples, fresh	7½
Apricots, dried	2½
Bananas	15
Cranberries	1 6/16
Peanuts	3¾
Miscellaneous	
Baking powder	2⅝
Bicarbonate of soda	4 oz.
Coffee	15
Cinnamon	½ oz.
Cloves	¼ oz.
Cocoanut, shredded	½
Gelatin	1 oz.
Ginger	1 oz.
Mustard	½ oz.
Nutmeg	⅛ oz.
Sage	1⅞ oz.
Salt	6
Salt rock	10
Tea	2 3/16
Vanilla extract	3 oz.
Vinegar, white	1 qt.
Yeast-cake, compressed	12 cakes

The following table shows the comparative cost and nutritive returns of the various classes of foods used in feeding the Diet

CALCULATION OF POLICE DIET

KIND OF FOOD	COST		FUEL VALUE		PROTEIN		CALCIUM (CaO)
	Amount	Per Cent of Total	Calories	Per Cent of Total	Grams	Per Cent of Total	Grams
Total dietary	$118.93	100	1,563,335	100	38,402.4	100	412.637
Beef, veal, mutton, pork	13.16	11.07	89,449	5.72	6,075.3	15.82	4.470
Fish	3.04	2.56	5,594	.36	947.6	2.47	1.977
Eggs	.30	.25	558	.04	49.5	.13	.335
Margarine and other fats	21.22	17.84	335,501	21.46	342.7	.89	
Milk and cream	12.05	10.13	94,445	6.04	4,430.7	11.54	222.973
Cheese	1.02	.86	7,161	.46	433.2	1.13	17.903
Grain products	32.72	27.51	647,144	41.38	21,053.6	54.82	81.338
Sugars, sweets	10.09	8.48	238,780	15.27	67.5	.18	24.393
Vegetables	12.08	10.17	85,445	5.47	4,180.4	10.88	44.815
Fruits	6.73	5.66	57,640	3.69	807.5	2.10	14.297
Miscellaneous	6.52	5.47	1,618	.10	14.4	.04	.136
Per 3,000 calories	0.23		3,000		73.7		0.79

Squad and will also serve as a general summary of this article. The table indicates the total cost, together with the total amounts of calories, protein, calcium, phosphorus, and iron. These quantities have been reduced to a 'per man per day' basis (3,000 calories); and on the last line will be found the cost, protein, calcium, phosphorus, and iron per 3,000 calories.

It will be observed from the table that it was possible to furnish 3,000 calories a day, the ration for the average man, at a cost of 23c per day at the prices prevailing in the retail markets in January, 1917. If this experiment were repeated to-day one would have to take into consideration the increased cost of foods of the past year. In interpreting the table below one should read horizontally across pages 276–277.

CALCULATION OF POLICE DIET (*Continued*)

CALCIUM (CaO)	PHOSPHORUS (P_2O_5)		IRON		COMPOSITE VALUATION	Ratio of composite Valuation to cost	Excess of normal acid in cubic-centimeter	Excess of normal base in cubic-centimeter
Per Cent of Total	Grams	Per Cent of Total	Grams	Per Cent of Total	Estimated by the following scale: Fuel value 6., protein, phosphoric acid, lime, iron, each 1			
100	1,491.497	100	7.966	100	100		20,969	19,534
1.08	139.820	9.37	.917	11.51	7.11	0.64	3,013	
.48	25.802	1.73	.035	.44	.728	0.28	587	
.08	1.340	.09	.001	.01	.055	0.22	42	
					12.965	0.72		
54.04	282.785	18.96	.317	3.98	12.476	1.23		2,420
4.34	27.928	1.87			1.01	1.17	86	
19.71	751.116	50.40	4.868	61.12	43.43	1.57	17,188	
5.91	8.131	.55			9.826	1.15		1,691
10.86	206.914	13.84	1.400	17.58	8.598	0.84		6,273
3.46	47.040	3.15	.423	5.31	3.616	0.63	53	9,150
.03	.621	.04	.004	.05	.076	0.014		
	2.86		0.015				2.7	

FUNDAMENTAL THEOREMS IN JUDGING MEN*

By EDWARD L. THORNDIKE
Professor of Educational Psychology, Teachers College

The judgments of men with which we are concerned are judgments of the man's fitness for some defined purpose. Such are the judgments of a life insurance company of a man's fitness to be insured, or the judgments by an examining board of a boy's fitness for entrance to college, or the judgment by an employer of a man's fitness for a certain job, or the judgment by a recruiting officer of a man's fitness to be a soldier. The theorems to which I ask your attention concern the amount of weight to be attached to any given fact or combination of facts about a man in making such judgments. Our problem is the abstract one of the general theory of weighing facts about a man and of using them conjointly to influence the judgment of his fitness. The theory will be illustrated from time to time by particular examples, but you should not let either the merits or defects of these distract you from the abstract issue to which they refer.

Consider first the case of a job, fitness for which is assumed to depend upon five facts, *a*, *b*, *c*, *d*, and *e*, and only these five.

a being the amount of He which the man possesses [1]
b being the amount of Ho which the man possesses
c being the amount of In which the man possesses
d being the amount of Co which the man possesses
e being the amount of K which the man possesses

CASE I

Using J to mean the amount of fitness of a man for the job, assume that any increase in He produces a proportional increase in J, as shown in Fig. 1.

*This article first appeared in the March issue of *The Journal of Applied Psychology*, and is here reprinted through the courtesy of the editors of that journal.

[1] If it aids memory for these symbols, the reader may think of He as health, Ho as honor, In as intellect, Co as ability to command men, and K as technical special knowledge and skill, but the case is to be argued in entire abstraction from any facts not stated in the assumptions.

Assume similarly that any increase in Ho, In, Co and K produces a proportional increase in J, each acting independently regardless of the amount of any other one of the five.

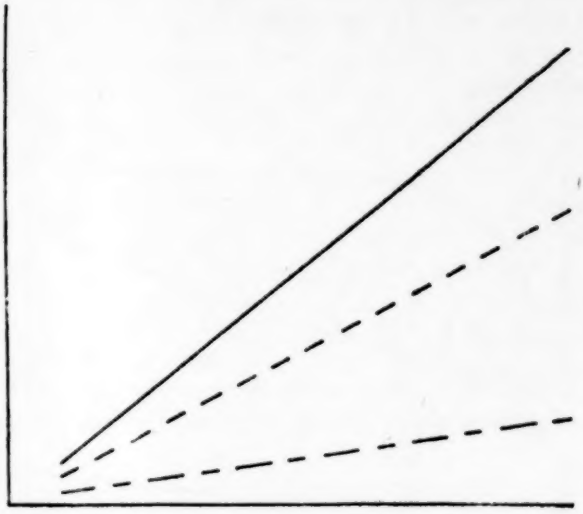

FIG. 1. Specimens of rectilinear relations. Amounts of the symptoms are scaled from left to right. Amounts of J are scaled from the base-line up.

Then we can estimate by how much one man is superior to another in J if we know the amounts of He, Ho, In, Co, and K that each has, and know the slopes of the relation lines for axes scaled in defined amounts of J and He, Ho, etc. We arrive at a man's status in J by adding the amounts of J he has by reason of whatever amounts of He, Ho, In, Co, and K he has. If, in respect to production of increase in J, one unit of He = 1 unit of Ho = 1 unit of In = 1 unit of Co = 1 unit of K, it suffices for all practical purposes of selecting for J to add He, Ho, In, Co, and K. If 1 Ho is of more importance than 1 He, that is, produces a larger increase in J (say 1.7 times as large), it suffices for all practical purposes to multiply the man's amount of Ho by 1.7 and then add. That is, when increments of the symptoms of J produce proportional increments in the thing to be selected for, we select by adding the amounts of the symptoms, these having

been weighted by multiplying each by a constant which is expressive of the number of units of J produced per unit of He, Ho, etc., respectively.

This assumption of proportionality or rectilinearity in the relation line is behind most of the scientific work that has been

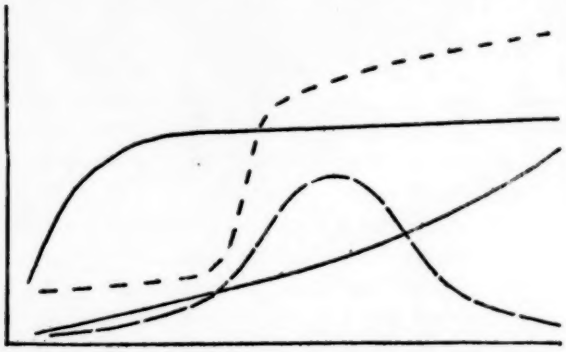

FIG. 2. Specimens of non-rectilinear relations. Scaling as in Fig. 1.

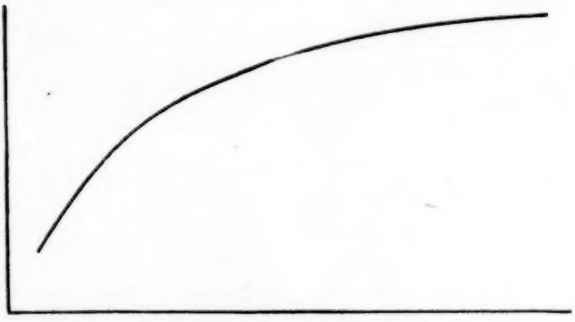

FIG. 3a. A relation whereby successive increments of the symptom produce smaller and smaller increments of J. Scaling as in Fig. 1.

done with educational and vocational selections. The technique of partial correlation coefficients and the regression equation, for example, assumes approximate rectilinearity of the relation lines.

CASE II

Assume the same independence of influence as before, and assume that each increment of He, Ho, etc., increases J, but do

not assume proportionality between the increments of He, Ho, etc., and the increments of J. We then have an infinite number of possible relation lines, a few of which are shown in Fig. 2.

Certain cases deserve special attention. For example, observe Fig. 3a where the same increment of a symptom produces less and less effect on J according to the amount of the symptom already present. Such might be the case with health and strength in the case of fitness for a job as a law clerk or stenographer or teacher, for example. One step up from invalidism might mean

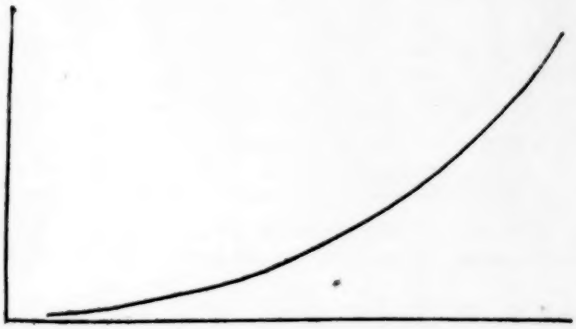

FIG. 3b. A relation whereby successive increments of the symptom produce larger and larger increments of J. Scaling as in Fig. 1.

much more gain in fitness than an equal step up from a robust and athletic level.

In Fig. 3b we have the converse case where a given increment does not amount to much unless it is an addition to already fairly large amounts. So, for example, the semi-interquartile range, or median deviation, of musical ability, when added to zero, would be of nearly zero value as a sign of fitness for employment as a soloist; but the same amount, when added to the ability of a second-rate performer worth $4 an evening, might make him worth $400 an evening.

In Figs. 4 and 5 we have the case of a quality which suddenly rises in value as a symptom from nearly zero to nearly its maximum.

It is very hard to find cases of intellectual or moral or economic qualities in men which are related to any important variety of

fitness after the fashion of Fig. 4 or 5. Indeed it is hard to find important physical qualities which are. Yet the existence of such a relation is the only justification for an enormous number of widespread practices in selecting men as fit for suffrage, for life insurance, for entrance to college, and for the army and navy.

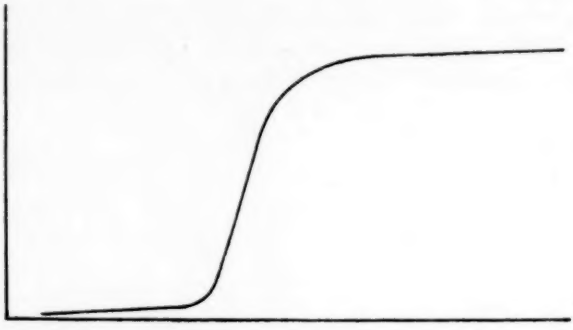

FIG. 4. A relation whereby successive increments of the symptom produce almost zero effect save at one short interval of the scale. Scaling as in Fig. 1.

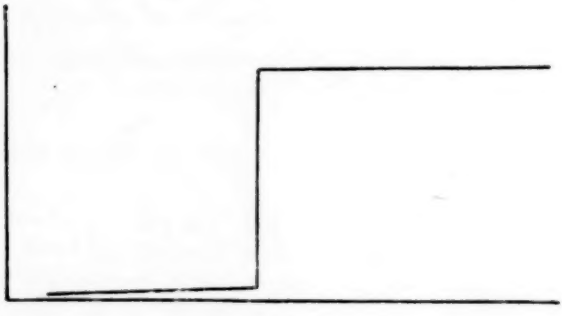

FIG. 5. An extreme case of Fig. 4.

Wherever a certain line is drawn as to weight per inch of height, temperance with alcohol, liability to heart disease, length of education, or the like, all those below the line being given equal credit (usually in the form of 'failed', 'rejected', 'unsatisfactory' or the like) and all those above the line being given equal credit (as 'normal' or 'passed' or the like), this single perpendicular-step relation is pragmatically assumed.

It may be wise, for certain legalistic reasons and for convenience in making and recording decisions, to cut the whole range of variation of a quality into two sections, crediting all amounts in one section as o and all amounts in the other section alike. It should be understood, however, that the procedure is almost the worst possible so far as concerns selecting the best quota of men. Only a failure to use the symptom at all or a negative use of it could be worse. For a line of zero slope, perpendicular slope, and then zero slope is an extremely poor fit for any of the relation lines in question. It is least objectional in cases of infection, as with malaria or syphilis.

How inefficient it is may be realized pictorially by Table I where the total credit really due two certain men is contrasted with what they receive by the 'perpendicular' or 'all or none' treatment. A similar inefficiency, though not so great a one, *must always* occur, the error being statistically that of excessively coarse grouping.

TABLE I

SIXTY BEING REQUIRED TO PASS, PASSING BEING REQUIRED IN NINE OUT OF TEN TRAITS

	Individual A	*Individual B*
Trait I	62	92
Trait II	64	88
Trait III	65	85
Trait IV	63	90
Trait V	49	49
Trait VI	65	52
Trait VII	66	86
Trait VIII	61	94
Trait IX	70	83
Trait X	62	87
Average	63 passed	81 failed

It is beyond the scope of this paper to balance this loss in efficiency in selecting the right man against the inconveniences of measuring each symptom along a linear scale, weighting it according to its relation line and combining weights by addition. The inconveniences are often great, but I am decidedly of the

impression that the inconveniences resulting from failing to get the best possible selection of men are as a rule many times as great.

The failure to use a scientific procedure is not so much due to apprehension of its real difficulties as to ignorance of its merits and the assumption of demerits which do not exist. Custom and language mislead us into treating a continuous distribution of variations as if they fell into sharply distinct groups, legal requirements in particular often exacting such clefts. The insecurity of fine grouping, and the lack of knowledge of precisely the best weights to attach, are assumed to be demerits which coarse grouping and zero or constant weights avoid. They do not avoid them.

Of whatever sort the relation line may be, the procedure is still (so long as the symptoms exert their influence independently) to attach weights and add. The difference from the first case of proportionality is that each separate increment of each symptom now may need its separate multiplier.

CASE III

Consider now the case where certain traits seem superficially each to produce an effect upon fitness for a job, but where really their value lies largely in a common element. Thus suppose that being born from the professional classes correlated to an extent of $+.5$ with success as an army officer, that length of education so correlated, that standing in class so correlated, that score in examinations at the training camp so correlated. Suppose that we have a thousand men ranked in these respects and also in ability to command men, which we will suppose also correlates $+.5$ with success as an army officer. The first tendency of a superficial thinker is to assign equal weight to each of the five traits. But if, as is likely, the first four intercorrelate closely, being related by a common element, say intellectual capacity, whereas power to command men correlates much less with their sum, the last should be given much more weight than any of the first four. To prevent all such errors we use either an experimental analysis or the technique of partial correlation.

The fundamental theorem in question may be stated as: Do not weight the same contributing element twice because it

appears in two or more traits. Or, more adequately: Attach weights to elements according to the amount of their contributions, irrespective of the number of symptoms in which they appear. A full determination of independent elements and their contributions, whether experimental or by the method of partial correlation coefficients, is very difficult, and has never been made in any case, to my knowledge. A complete determination is indeed not necessary for fairly efficient prophecy. Where the best possible weighting would prophesy fitness with, say, a re-

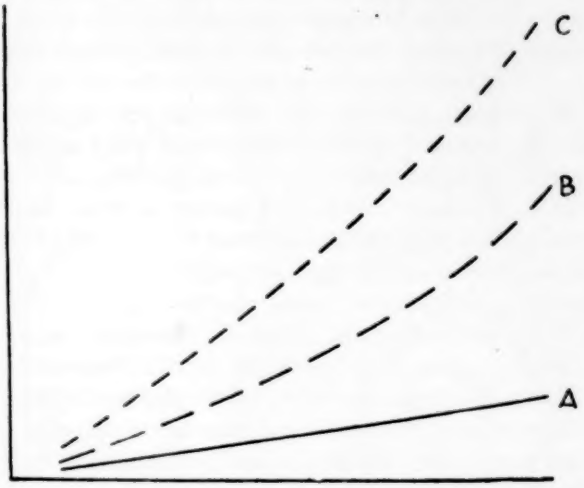

FIG. 6. A relation whereby the amount of J produced by some factor depends also on the amount of some other factor. A, B, and C are three different relations between a factor and J, depending on the amount of a second factor.

semblance to demonstrated fitness of .95, a prophecy to the extent of .90 will commonly be reached by such a rough weighting as a competent thinker can devise in an hour or two upon inspection of the relevant correlations. So for practical purposes, we may translate the theorem into: Attach weights to traits only after knowledge of their intercorrelations.

CASE IV

Consider now the case where a symptom's amount of influence depends upon not only the amount of the symptom itself, but

also the amount of some other symptoms. For example, suppose that each increment of intellect (In) contributed 3 J, that is, 3 units to fitness for a certain job, if only a certain low degree of honor (call it 5 Ho) characterized the man, but that the same increment of intellect (In) contributed much more J if the man was twice as honorable (10 Ho). Or, more precisely, let the relation of intellect (In) to fitness (J) be line *a*, when honor (Ho) is 0, line *b* when honor (Ho) is 1, line *c* when honor (Ho) is 2, as shown in Fig. 6. In such a case the amount of In is obviously to be multiplied by a factor proportional to the amount of Ho in addition to all other weighting of In.

The dependence of the amount of influence of a trait upon the amount of some other trait possessed by the man will often be more complex than that described in the illustration. For example, the value of technical knowledge and skill for a certain job might vary as the square root of the man's intellect or as the square of his intellect. There may also be many sorts of irregular relations in these dependencies of one trait's influence upon the amount of another trait that is possessed.

I am not aware that any scientific investigation has measured any of these dependencies. There is, however, good reason to believe that they exist and are important. A man's possession of what we call energy, for example, seems to be a multiplier for his intellect or skill. A man's loyalty or devotion in any particular job seems to be a multiplier of his other equipment for it. What we call roughly interest in success, or determination to succeed, or ambition, seems to be a multiplier for energy. And in theory, at least, we must admit it as a fundamental theorem that prophecy of the degree of influence of any amount of trait requires consideration of the amount of every other trait in the man in question.

There are other principles concerning the use of facts in the selection of men which must be followed to make the best possible prophecy, but limitations of time prevent their discussion now. In the time that remains I may simply summarize our findings roughly and compare the scientific with the impressionistic or intuitional use of facts about a man.

We have seen that the status of a man in the traits relevant to fitness for a job may be expressed in an equation: John Doe =

$7a + 9b + 4c + 21d$ ..... A prophecy of his fitness relative to other men is obtained by attaching weights to *a*, *b*, *c*, *d*, etc., in view of (1) their relations to fitness, (2) their partial constitution by common elements, and (3) any dependencies whereby one gains or loses in influence according to the amounts of the others which are present. The setting up of an equation of prophecy from an equation of status will usually be very complex, but a rough approximation, if sound in principle, will often give excellent results. In so far as the lines of relation, interrelation, and dependency are rectilinear, the technique is greatly simplified, and a rough approximation to this is probably often the case.

Even when approximations are used and when, by good fortune, many of the relations concerned are rectilinear, sound procedure will still be more elaborate and difficult probably than has ever yet obtained in practice. Practice is thus justified to some extent in judging fitness experimentally by tests with dummy operations like those of the job in question, as well as analytically by a weighted combination of contributing elements.

All this study of relation lines, intercorrelations, facilitations, and inhibitions and resulting weights by multiplying and adding, represents a scientific execution of just what the competent impressionistic or intuitional judge of men tries to do. The strength of such intuitional judgments in comparison with the formal systems of credits and penalties of the past has been, not that the intuition was less quantitative, but that it was more so! The formal systems of the past have used symptoms merely additively and often with only an 'all or none' credit. They have not allowed for the undue duplication of credits by intercorrelations, and have not sensed the importance of the multiplying effect of certain traits upon others. The competent impressionistic judge of men does respond to these interrelations of the facts and sums up in his estimate a consideration of each in the light of the others. If there are ten traits involved, say ten entries on an application blank, he may be said to determine his prophecy by at least $10 + 9 + 8 + 7 + 6 + 5 + 4 + 3 + 2 + 1$ quantities, since he responds to each trait in relation to all the others. There is a prevalent myth that the expert judge of men succeeds by some mystery of divination. Of course, this is nonsense. He succeeds because he makes smaller errors in the facts

or in the way he weights them. Sufficient insight and investigation should enable us to secure all the advantages of the impressionistic judgment (except its speed and convenience) without any of its defects.

COLLEGE NEWS AND DEPARTMENTAL NOTES

WAR SERVICES OF THE TEACHERS COLLEGE STAFF

At the suggestion of Dean Russell, the Welfare Committee, of which Professor Stevens is chairman, made a report on the war service activities of all members of Teachers College, both students and faculty. As the result of a census conducted by Professor Andrews, the following report has been prepared by Professors Andrews and Stevens.

On this roll will be found the names of members of the instructional staff of Teachers College who have undertaken war emergency service, with brief notes as to the character of the service. While the record is not complete, it will, it is believed, not only present information of interest, but doubtless have suggestions of possible service to many readers. Some facts are also added regarding student activities in Teachers College and in its schools.

ALLAN ABBOTT

President's address before National Council of Teachers of English on "The War and the Teaching of English."

MAY ALLINSON

Coöperated with office of Home Economics, United States Department of Agriculture, by making a study of several hundred family dietaries, as part of National Food Survey, in course of a Research in Economic and Social Problems.

BENJAMIN R. ANDREWS

Chairman of the Home Economics Committee of the Charity Organization Society of New York City; from June to September, 1917, with United States Department of Agriculture as specialist in household thrift; budget lessons for the National War Savings Committee; magazine articles and addresses on household budgets and the war.

LOUISE S. ATKINSON

Arranging automobile rides for convalescent soldiers and sailors.

MATTHEW G. BACH

Volunteer reader and translator of foreign newspapers, working with the Language Corps of Columbia University Organization for National Defense; volunteer instructor in Training Course for Military Interpreters, summer of 1917, Columbia University.

EMMA R. BAKER

At work upon statistics for the government in matters of recipes and menu-making; food conservation in Whittier Hall dining-rooms.

L. RAY BALDERSTON

Directed war service of her students in preparing and fitting out sixty-five comfort kits for the naval contingent on board the *Granite State;* making clothing for French and Belgian babies; collecting and renovating clothing.

ANNA W. BALLARD

Carried on correspondence with French soldiers since the beginning of the war, supplying their needs with the assistance of friends in England; working for French orphans.

LAURA I. BALDT

Magazine articles on clothing.

ANNA BARROWS

From September, 1917, to March, 1918, specialist in Home Economics, States Relations Service, United States Department of Agriculture, Washington, D. C.; three bulletins to aid emergency and county agents; travelled 10,000 miles meeting groups of home demonstration agents and extension workers, state meetings, etc.; in 1917, prepared a series of articles for the *Independent* and the *Journal of Home Economics;* lectures, Chautauqua School of Domestic Science, summer of 1917.

ALICE F. BELL

Lectures and magazine articles for the extension of training for nursing service.

MAURICE A. BIGELOW

Has been giving from ten to twelve hours a week since January 1 on work of the American Social Hygiene Association in coöperation with the Commission on Training Camp Activities and the Surgeon General's Office.

FREDERICK G. BONSER

Work on Committee for Rehabilitation of Disabled Soldiers, particularly concerned with Occupation Therapy.

CLYDE A. BOWMAN

Absent on army service as Lieutenant of Engineers, now stationed at Camp Custer, Michigan.

WILLIAM E. BRECKENRIDGE

Engaged in preparing war problems in mathematics to be used in secondary schools; lecturing on war problems in mathematics; preparing men of Stuyvesant High School for service at Sandy Hook proving grounds, Fort Hancock, in making range tables for the big guns.

JEAN BROADHURST

Is preparing an anthology of war poems; also a bulletin issued by the American Rights League; preparing a book for instruction of workers in war hospitals.

OTIS W. CALDWELL

Member of and lecturer for the National Security League

MABEL CARNEY

Member of National Committee on Country Life; member of Student Committee on Education Reorganization; article on rural schools for Russian newspapers; lectures on rural education, emphasizing war service from teachers and public.

EDITH P. CHACE

Supervising of sewing classes making French Relief garments.

ANNA COLMAN

Co-editor of a bulletin on Corn Calories for Conservation.

EVELYN L. COLLINS

Contributed to the *Psychiatric Quarterly*, October, 1917, an article on Course in Occupation Therapy; instructor of training classes in invalid occupations with the National League for Woman's Service; lecturer for the Federal Food Administration; organizer and lecturer for the New York City Aid Committee.

ELIZABETH C. COOK

Is assisting in the social service emergency work at Bellevue Hospital; projected magazine articles on French Influence in Early American Liberalism.

ANNA M. COOLEY

Member of the Woman's Committee of National Society for Vocational Education; member of the Executive Committee of Dress League of New York City; studying conservation of materials.

MARGARET ZERBE COWL

Member of committee to select music to be used by the Four-Minute Men in propaganda work; making study of musical therapeutics to be

used in connection with reconstruction work in hospitals; recitals for soldiers in Toronto and St. Johns, Canada, and various points in the United States.

ARTHUR D. DEAN

Boy placements on farms in New York State; organizer of military equivalents for compulsory military training in the state; Junior Red Cross vocational work; member, Committee on Education and Science, National Council of Defense; addresses and articles on War Service of our Schools.

LUCIA W. DEMENT

Working upon posters and post cards for W. S. S. and war relief.

JOHN DEWEY

Member of the Committee on Labor of the Council of National Defense.

PERMELIA DOTY

Secretary of the Nursing Committee of the Mayor's Committee of the Council of National Defense.

ARTHUR W. DOW

Member of the Committee on Occupation Therapy; addresses on art teachers' war service; preparation of a course for supervisors of occupations; advising and giving help to those engaged in occupation work; enlisted the coöperation of Printers' Association in helping disabled soldiers; committee on special war service courses.

LILLIAN C. DREW

Lectures on Reconstruction in Central Branch, Y. W. C. A., New York City; organization and giving of instruction in courses for Reconstruction Aides, Teachers College.

SAMUEL T. DUTTON

Chairman of the Executive Committee of the Organization for Syrian and Armenian Relief; general secretary of the World Court Peace League.

WALTER H. EDDY

Captain, Sanitary Corps, National Army, "Somewhere in France."

N. L. ENGLEHARDT

Voluntary service for Local Exemption Board No. 135.

JANE FALES

Member of the Executive Committee of Columbia Woman's War Work Room; does purchasing and cutting of garments—over 1,000 this winter; member of the Home Economics Committee of the Charity Organization Society, making a study of clothing economy under war conditions.

HAROLD U. FAULKNER

Spent Christmas vacation in research work for the government.

KATHERINE A. FISHER

Member of a committee of Bureau of Municipal Research for reorganization of the school lunch service in the New York City schools; assisted Bureau of Municipal Research in reorganization of New York Woman's Food Exchange; member of committee to reorganize food service at Columbia Commons; bulletin, *Home Canning of Fruits and Vegetables*, distributed by McGill University in United States and Canada; organized food conservation work, 1917, in rural districts of Quebec Province, giving lectures, etc.; through the coöperation of the Labor Bureau of Ontario, fitted MacDonald College students into positions on farms, summer of 1917.

ELBERT K. FRETWELL

Service in scouting movement for both men and women.

J. MONTGOMERY GAMBRILL

Member of the Education Committee of National Board for Historical Service; preparing bulletins for the same and for the Bureau of Education; lectures on the war.

WILLIAM J. GIES

Member of the Biochemical Subcommittee of Three of National Research Council: making studies of food and biochemical products for the use of the Army and Navy.

ARTHUR I. GATES

Contributed to the *Journal of Applied Psychology*, March, 1918, "Psychological Methods of Testing Ability as Expert Marksmen," working for the Committee on Classification of Personnel under the Adjutant General of the United States Army, and assisting in devising trade tests for this committee.

FRED F. GOOD

Emergency course on automobile mechanics.

ANNIE W. GOODRICH

Chairman of Nursing Committee of the Woman's Committee of the Mayor's Committee of National Defense, New York City; National Nursing Committee. Absent on leave in active service as Chief Inspecting Nurse of the Inspection Department of the Hospital Division of the United States Army in United States and abroad.

WILLYSTINE GOODSELL

Chairman, Program Committee for the World Democracy Movement for Teachers College; addresses on responsibilities of women for larger public service.

COLBA F. GUCKER

Joined the Columbia Ambulance Corps in June, 1917; now has the rank of First Lieutenant and is reported to be in France.

LILLIAN M. GUNN

Articles on food conservation in *McCall's Magazine;* addresses on conservation in towns near New York City.

EMMA H. GUNTHER

Chairman, Dietitian Committee with Bureau of Nursing Service, American Red Cross, Washington, D. C.; member of Information Committee of Columbia University War Service work; assisted in preparing bulletins on Woman's War Work, Columbia University; talks on opportunities for Dietitian War Service; visited cantonments to inspect the work of dietitians and reported to Washington.

HELENE J. HARVITT

Volunteer interpreter for the State Military Census in June, 1917, interpreting French, Russian, German, Italian, Spanish, and Polish.

JESSICA M. HILL

Revising war pamphlets for publication; collecting clothing for Armenian and Belgian refugees, and books for libraries in cantonments.

PATTY S. HILL

Member of Board for Polish Starving Children; kindergarten department relief work—including raising fund to send a representative into canteen service.

LETA S. HOLLINGWORTH

Clinical instruction at Bellevue Hospital to psychologists preparing to conduct the psychological examination of recruits and officers of the National Army; psychological examination of prisoners and patients at Bellevue Hospital (psychopathic and alcoholic services).

GEORGE T. HOLM

Engaged in teaching swimming to naval men in training at Columbia University.

FLORENCE M. JOHNSON

Member of the Nursing Committee of the Woman's Committee of the Mayor's Committee on National Defense; chairman of the New York Emergency Committee (Nursing) on Home Defense; director of Atlantic Division of Red Cross Nursing Service; member of the New York County Chapter of the Red Cross.

HENRY JOHNSON

Member of the National Board for Historical Service; editing war bulletins for the board; giving addresses on historical aspects of the war.

I. L. KANDEL

Addresses on educational reconstruction in England, Germany, and France; voluntary service in connection with the National W. S. S. Committee.

TRUMAN L. KELLEY

Member of the Committee of National Research Council on Tasks Requiring Special Skill; rendered service for the following national committees: Committee on Psychology (Division of Psychology, Surgeon General's Department) especially in devising tests for illiterates; Committee on Classification of Personnel in the Army (under the Adjutant General), especially in investigating Army Schools and in the drawing up of trade tests; Committee on Psychological and Pedagogical Problems (of National Research Council), in surveying methods of instruction at Camp Dix.

JOSEPHINE HEMINWAY KENYON

Supervisor of lecturers in New York City and State on educational work for women and girls under the Woman's Section of the Commission on Training Camp Activities, of which Doctor Katherine Davis is the head.

WILLIAM H. KILPATRICK

Chairman, Executive Committee of Patriotic Service League, Unit 59; lectures on the effect of the war on education; Liberty Loan Canvass; Y. M. C. A. Canvass; Students' World Democracy Movement.

AZUBAH J. LATHAM

Has written several patriotic songs and served as an unofficial adviser of entertainment for camps, hospitals, etc.

MADELAINE L. LIBERT

Assisted the Committee on Food Work at the Columbia War Hospital (summer of 1917); also adviser to chefs in wealthy families to cut down food waste.

MARIE LOVSNES

Lecturing on war work to farmers and rural teachers.

ELIZABETH MANN

Has prepared articles and given addresses on food conservation.

MAUD MARCH

Member of the committee in charge of the Recreation Center for Soldiers and Sailors conducted in Thompson Gymnasium.

W. A. MCCALL

Engaged in the construction of psychological tests for the Army, and in the selection of aviators; collected tests for the French and British Military Commission.

MARY MCCORMICK

Training volunteer workers for Malnutrition Clinics; acted as consulting aid to community kitchens for the undernourished; lectures on food conservation.

CHARLES T. MCFARLANE

Lectures and bulletin on relation of geography and trade to the war and to future reconstruction.

ELLEN B. MCGOWAN

Editing a bulletin on conservation of wool.

FRANK M. MCMURRY

Chairman of the Committee on International Relations, College World Democracy Movement.

ALBERT A. MÉRAS

Captain, National Army; member of General Staff, "Somewhere in France."

DAY MONROE

Acting as City Leader for New York under the Bureau of Conservation (District 1), New York State Food Commission.

PAUL MONROE

Member of the Committee on International Education Relations; Final Settlements Committee of New York Peace Society; Committee on Federal Participation in Education; many addresses on matters pertaining to the war and education.

ANNIE E. MOORE

Member of Committee on Information, War Service Bureau; Teachers College War Relief Committee.

HERMANN N. MORSE

Member of a committee of the Federal Council of Churches; bulletins entitled *War-Time Pastor in Town and Country* and *Summer Schools for Country Pastors in War Time;* Summer School course on war-time work of country ministers; arranged for 1,000 war-service institutes in country churches throughout the United States, winter 1917–1918; assisted in placing about fifty city boys and men on farms in summer of 1917.

LOIS COFFEY MOSSMAN

Training of women teachers for the rehabilitation of disabled soldiers.

MARY ADELAIDE NUTTING

Chairman of National Committee on Nursing, Council of National Defense; Advisory Committee for Vassar College Summer School of Nursing; Nursing Service Committee of the American Red Cross.

MARY H. PEACOCK

Addresses on food preservation; assisted in the organization of Community Canning Clubs.

EDWARD H. REISNER

Assisted in the Food Survey of New York City.

MARY SWARTZ ROSE

Home Economics representative of United States Food Administration for New York City. Director, Department of Food Conservation for New York City under New York State Food Commission. Book: *Ordinary Food in War Time;* lectures on food conservation.

HENRY A. RUGER

Occasional service in connection with mental tests of the Army, etc.

JAMES EARL RUSSELL

On leave of absence in Washington, D.C., organizing the Division of Education of the Department of Reconstruction of the Surgeon General's Office of the United States Army; developing plans for a convalescent hospital in connection with a training school in agriculture for wounded soldiers; member of the Greater New York Food Census Committee; promoting ways and means of war-time service on the part of Boy and Girl Scouts, including the training of scoutmasters.

JULIUS SACHS

Acting in an advisory capacity for the Committee on Public Information, Washington, D. C.; a contributor to the Committee on Historical Information Related to the War.

BERTHA E. SHAPLEIGH

Consulting service in office of Food Administration, Washington, D. C., 1917; written: conservation menus for *Today's Housewife* and for the bulletin, *Save Our Sugar*. Lectures and demonstrations on food conservation.

HENRY T. SHERMAN

Member of American Red Cross Mission to Russia, 1917; chairman, Advisory Committee, Bureau of Food Conservation for New York City under Federal Food Administration. Various addresses on the food situation; bulletins on Wheat Substitutes in Columbia War Papers.

DAVID EUGENE SMITH

Problems in arithmetic, grades three to eight, relating to Thrift and War Saving Stamps; problems in mathematics for nurses in Government hospitals; Report on International Currency.

DAVID SNEDDEN

During 1917, New York City Director of the Boys' Working Reserve; article in *Educational Administration and Supervision* entitled "Vocational Education after the War."

WILHELMINA SPOHR

Directing making of 300 garments for French and Belgian children.

ISABEL M. STEWART

Member, Committee on Instruction, New York Chapter of Red Cross; chairman, Advisory Committee from League of Nursing Education on Vassar College School for Nurses; pamphlets, *Nursing a National Service* and *A Message to Secondary School Principals and Teachers*, published by National Committee on Nursing, and a number of articles in nursing journals.

EDGAR S. STOWELL

Concerts for Red Cross, for the Y. M. C. A., and other war organizations.

GEORGE D. STRAYER

Chairman, National Education Association Joint Commission on the National Emergency in Education and the Program for Readjustment during and after the War; chairman, Division of Education, National War Savings Committee, United States Treasury Department, Washington; editing bulletins on War Savings Campaign, sent to all schools of United States in support of War Savings; lectures on National Emergency in Education before National Conference of American Lectures, Washington.

LAVINIA TALLMAN

Member of the Interdenominational Committee planning for training social-religious workers, particularly with reference to Americanization of immigrants.

SALLIE B. TANNAHILL

Member of the general committee of Art War Relief; member of the Committee for Permanent Blind Relief War Fund for Soldiers and Sailors.

EDWARD L. THORNDIKE

Committee on Classification of Personnel in the Army, under the Jurisdiction of the Adjutant General, August, 1917, to date; Psychology Committee of the National Research Council, May, 1917, to date; chairman, Subcommittee on Tests of Special Skill; executive secretary, Subcommittee on Problems of Aviation, including the Examination of Aviation Recruits; American Psychological Association; chairman, Committee on the Selection of Men for Tests Requiring Special Skill.

MARION REX TRABUE

Chief Psychological Examiner with the rank of Captain, Camp Grant, Rockford, Illinois.

CLIFFORD B. UPTON

Co-author of *Mathematics for Nurses in Government Hospitals;* member, Greater New York Food Census Committee; lessons on thrift for National War Savings Committee; articles and addresses on thrift and Liberty Bonds.

MAY B. VAN ARSDALE

Member, Advisory Committee, Bureau of Food Conservation, New York State Board Commission; food articles in TEACHERS COLLEGE RECORD; emergency bulletins on Cookery—Bureau of Publications, Teachers College; lecture on Food Conservation for Government Speakers Bureau, women's clubs, etc.; acting in advisory capacity to women contemplating the establishment of canning kitchens, etc.; frequently called to demonstrate, to lecture, and to teach Food Conservation.

SADIE B. VANDERBILT

Assisted in equipping medical corps of a New York hospital.

HERMANN T. VULTÉ

Bulletin on Fat Conservation for Emergency Committee, American Home Economics Association.

MARY AGNES WILSON

Summer, 1917, organizing work and addresses for the Red Cross and for Armenian Relief.

RUTH WILMOT

Cutting garments for the Columbia workshop.

CLARENCE H. WHITE

Poster Competition and Patriotic Committee of American Institute of Graphic Arts.

MARY T. WHITLEY

Tests of advertisements for Publicity Committee of Mayor's Food Conservation Committee.

WARREN H. WILSON

Organized system of Loyalty Conferences in thirty states with 160 men enrolled as organizers; ten addresses during the last two months for the Committee of Public Information.

CORA M. WINCHELL

Member of the Home Economics Committee, Charity Organization Society, New York City, dealing with war conditions existing in homes of small wage-earners; member of Mount Vernon Canteen Service, Pel-

ham Bay Park; directing committee of students investigating for United States Bureau of Education the utilization of laboratory products in food work throughout the United States.

EMMA A. WINSLOW

Member of New York City Council of Women's Organizations; chairman, Social Work Committee, American Home Economics Association; lectures on Household Budgets, and consultant, Home Service Training Classes and Institutes, Atlantic Division, American Red Cross; June to September, 1917, specialist in Home Economics, Office of Extension Work, North and West, United States Department of Agriculture, working on organization plans for urban extension work; directing student war service: (1) Volunteers with Home Service Section, American Red Cross, visiting families of soldiers and sailors and giving dietetic advice. (2) Assistants in coöperation with students of the New York School of Philanthropy, in investigation of wage changes and household budget readjustments, conducted by the Home Economics Committee of the Charity Organization Society.

THOMAS D. WOOD

Recreation Center for Soldiers and Sailors in Thompson Gymnasium; training volunteer workers for Malnutrition Clinics; member of National Committee on Health of School Children of National Child Labor Committee and New York Academy of Medicine; Committee on Health Problems of National Council of Education; Committee on Physical Reserve of National Security League; addresses on War's Emphasis on Health Education, etc.

THE EMPLOYEES OF TEACHERS COLLEGE

Several members of the working force have sons in the Army or Navy; several are investing all of their savings in Liberty Bonds and in Thrift Stamps; every member of the force has contributed to the Knights of Columbus drive; almost all are members of the Red Cross, and many have contributed to the appeals for Polish, Servian, Armenian, and Belgian relief.

STUDENT ACTIVITIES IN TEACHERS COLLEGE AND ITS SCHOOLS

The household arts education students in their practice teaching in Public School No. 43 have been able to accomplish considerable war work; the classes in cookery have throughout the year followed the program of the Food Administration; the classes in textiles and clothing have made 300 garments for

French and Belgian children, the materials being donated by members and friends of the Woman's Faculty Club.

Students in the household economics department have done field work in budgets with the New York City Budget Clubs; have collected data for a study of several hundred families as to wages and budgets; and are assisting in preparing educational material for War Savings campaigns. One hundred and fifty students volunteered as workers for the recent food census of New York City.

The student government body at Whittier Hall voted to aid the general conservation movement by giving up bread at dinner for the period of the present wheat shortage.

Students in the department of nursing and health have through the Nurses' Club organized an emergency nursing unit for service in accidents in or near New York, and subject to call by the local Red Cross. In a recent tryout the unit of ten nurses got together, ready for service, in twenty-five minutes.

Some nursing students are helping direct the work in surgical dressings; others are teaching Girl Scout groups at Horace Mann; and others are doing visiting nursing work in the Morningside district.

Students and staff of the kindergarten department during 1915–1916 raised $100.50 for French, Belgian, and Polish child-relief work; the money was raised by a Japanese tea, a bazaar and sale of pictures. During 1916–1917, $36.50 was raised for French orphans, and $100 for the children of Poland.

The Religious Organizations of Teachers College have carried on the following war activities during 1917–1918, in addition to the lines of service that they have carried on for several years past: (1) The drive for the Student Friendship Fund in November, 1917 (in which the Religious Organizations coöperated with the Students' Executive Council). (2) The Knights of Columbus drive, 1917 (Catholic Club), in which pledges were received to the amount of $1,253.25. (3) The Jewish War Sufferers Relief Fund.

The following subcommittees of the Religious Organizations have done active and efficient work in their various fields: (1) Work in Settlements, seventy volunteers; (2) Charity Organization, fifteen workers; (3) The Americanization of Foreigners, nineteen workers teaching English and carrying on club work;

(4) Four-Minute Men; (5) War-savings Committee (in coöperation with the Women's Club); (6) Recreation for Soldiers and Sailors, a committee of twenty students taking entire charge of the Recreation Center for soldiers and sailors, Thompson Gymnasium, Tuesdays from 7:45 to 10:30 p. m., entertaining each week about one hundred men, carried on in coöperation with the physical education department; (7) Summer work in small communities.

Red Cross Auxiliary, number 34, has had three active subcommittees: (1) Surgical Dressings Committee, with headquarters in the social room, where 3,800 pieces were made between November 1 and April 1; Surgical Dressings Annex, every Thursday evening, from 7 to 9, at the faculty parlor at Whittier Hall. The Nurses Club also has six teams meeting weekly. Coöperating with this committee the members of the Woman's Faculty Club give their services in the surgical dressing work every Monday evening. (2) Foreign Relief Committee: (*a*) Armenian Relief Committee has raised this year about $500, for the relief of Armenian babies. (*b*) Clothing has been collected for the destitute people of France, Belgium, Poland, and Halifax. (3) Knitting—780 finished pieces were reported on April 1. Red Cross knitting groups with some one to read aloud have been organized in Whittier Hall, Furnald Hall, and the Women's Club.

The Students' Executive Council carried on the Student Friendship War Fund drive in November, 1917, raising a total of $27,873.

A fund has also been raised for libraries for soldiers; $300, books and magazines have been collected in the Religious Organizations room for use in the campaign. Many workers and ushers have been supplied for local war relief movements, such as Hero Land, Relief Fund collections in streets and public buildings, doll dressings for sales, ticket-selling, and so forth.

The Helmet Club conducted the campaign for the Second Liberty Loan, reaching a total of $12,300.

The Women's Club has conducted the sale of Thrift Stamps and War Savings Stamps in the College.

WOMAN'S FACULTY CLUB

Contributed about $300 for Madam Paderewski's home for girls in Poland; about $50 for the garments made under Pro-

fessor Spohr's direction by the Speyer School children; $8 for infant kits prepared by Mrs. Rankin; $60 for a knitting machine to be used in the club. Members of the club work in Surgical Dressings Room every Monday evening.

THE CLASS OF 1918

The Class of 1918 has purchased a Liberty Bond for its parting gift to the College.

HORACE MANN SCHOOL FOR BOYS

Proud of a service flag of 165 stars, the Horace Mann School for Boys has entered into every possible branch of war work.

Twelve French orphans are being cared for by the high school boys who raise $4 a month for each; boxes of clothing, boots, etc., have been sent; Christmas cards were printed and sold clearing $32, sent to France for an expatriated boy, sick from privations and cruelty in Germany.

The manual training shop has made the following for Red Cross work: Twenty-four dozen wooden knitting needles; three dozen Red Cross packing cases; hammered sheet copper articles sold, $18.00. The shop will execute orders for hammered sheet copper work, the proceeds to go to the war relief.

The sale of War Saving Stamps was organized by dividing each form into groups of ten, with a captain. Since February 11, 1918, 2,436 Thrift Stamps and 1,109 War Saving Stamps have been sold, with a value of $5,190.30.

Liberty Bonds have been sold through the office of the School to an amount of over $155,000.

HORACE MANN SCHOOL—GIRLS LEAGUE

Under the direction of the Girls League the Junior Red Cross has 877 members; money raised for Red Cross and used for supplies, $365; money raised by Girls League for war relief, $870; number of knitted articles made by Horace Mann School and sent to Red Cross and to individuals by the Girls League, 447.

SPEYER SCHOOL

The pupils of the Speyer School reported subscriptions of $13,900 in the Second Liberty Loan. They have taken the lead in the competition in the War Savings Stamps campaign in

New York City schools, Speyer pupils on April 12 having purchased a per capita of $26.15 while the nearest competitor had $16.60. The high per capita was achieved partly by personal purchases and partly by active salesmanship. In recognition of their achievement, Mr. and Mrs. James Speyer presented to the pupils a handsome silk trophy flag on April 19. In the Third Liberty Loan the Speyer pupils in the first ten days secured $48,000 in subscriptions. Their apportionment for the district was $45,000 but the pupils adopted the slogan, "Over the Top with $65,000 and a Bond Sale for Every One of Us."

LINCOLN SCHOOL

Through the pupils of the Lincoln School over $1,100 have been subscribed in War Savings and Thrift Stamps to date and the weekly average subscription is above $50.

TEACHERS COLLEGE GIVES GOVERNMENT COURSES FOR RECONSTRUCTION AIDES

On April 10 work was started at Teachers College in two special courses which have as their object the preparation of candidates for the newly created governmental position of Reconstruction Aide. These two courses are to run for eight weeks each and are to be repeated in the summer, beginning July 1. They are known as Therapy 1 (Physical Therapy) and Therapy 2 (Occupational Therapy).

Therapy 1 consists of instruction in anatomy, physiology, personal hygiene, massage and remedial movements, hydrotherapy, electro therapy, bandaging and application of splints, posture training, physical exercise, applied training, applied psychology, hospital routine, and the relation of physical therapy to the problem of reconstruction. There is also a setting-up drill three times a week for the physical betterment of the students with a special emphasis on posture. At the clinic of the New York Orthopedic Hospital, through the courtesy of Dr. Hibbs, each student receives instruction and practice for three hours daily in massage and remedial exercises and becomes familiar with general hospital routine.

Therapy 2 offers work in weaving, basketry, block-printing, wood-cutting, knitting, beading, personal hygiene, hospital routine, and reconstruction. For those who are already expert in craft work additional courses are open in design, clay-modeling, metal work (including tin-can work), toy-making, rug-making, netting, cement-working, bookbinding, and poster work.

To make clear the general situation in regard to reconstruction work, the following statement has been prepared by Professor Arthur Dean, Mrs. L. C. Mossman, and Miss L. C. Drew.

Teachers College has been requested by the Surgeon General's Office to establish short intensive courses for training Reconstruction Aides for the hospital branch of the medical service. In answering this call to national service, it has simply extended a well-established program of instruction for civilian hospitals.

There has long been a demand for workers in the field of Physical Therapy and Invalid Occupations. With the new problems of war which will throw back in the country large numbers of crippled, disabled, and shell-shocked men, this demand will undoubtedly be tremendously increased.

Aides who take either of these courses will do so at their own expense with the understanding that the Government assumes no obligation to accept them for service on the completion of the course. If accepted they will be put on the active list and will be expected to respond immediately to any call from the Government; their status will be that of civilian employees under the Surgeon General of the United States Army. Appointees will be assigned to work in military hospitals.

The class in physical therapy which is directly under the direction of the department of physical education, consists of fifteen women who are specially qualified for this work. The class in occupational therapy is made up of forty-one women who have had considerable experience in several arts and crafts. Both courses provide for practice teaching in the civil and military hospitals.

The War Department has made use of the term 'Reconstruction' in official reference to the work which is to be undertaken to assist disabled soldiers and sailors to as complete a recovery as possible. The Division of Reconstruction has announced that hereafter no member of the military service disabled in line

of duty, even though not expected to return to duty, will be discharged from service until he has attained complete recovery or as complete recovery as it is to be expected that he will attain when the nature of his disability is considered. The inauguration of this continued treatment will result, during the period of the war, in the saving to the service of a large number of efficient officers and soldiers who without it would never become able to perform duty.

Physical reconstruction may be defined as the completest form of medical and surgical treatment carried to the point where maximum functional restoration, mental and physical, has been secured. To secure this result, the use of work, mental and manual, will be required during the convalescent period. This therapeutic measure, in addition to aiding greatly in shortening the convalescent period, retains or arouses mental activities, preventing 'hospitalization', and enables the patient to be returned to service or civil life with the full realization that he can work in his handicapped state, and with habits of industry much encouraged, if not firmly formed.

For the actual therapeutic work, the Physical Reconstruction Aide will begin the process of re-education at the bedside of the wounded soldier as soon as his condition permits the application of this mode of treatment. There will be certain definite physical disabilities which must be overcome or relieved. Weak and paralyzed muscles will need strengthening and training; loss of limb will necessitate readjustment of neuro-muscular control, and stiff joints must be made flexible again.

This physical repair and readjustment should be accompanied by a mental stimulus, such that depression and apathy may be overcome, and an interest aroused in the ultimate result of future efficiency and usefulness in the world of men. This close relation between the physical and the mental is regarded as such an important phase of this work that only women of vision, education, and a certain personality are considered eligible.

The main part of the work of the Physical Reconstruction Aide is the application of massage and remedial exercises. Women who have had training and experience in the field of physical education are especially fitted. In addition, however, it has been thought practical to train others, who have a back-

ground of education and the proper personality, for the service.

The College expects to take up a little later the question of training teachers for curative workshops, which is a second stage in the rehabilitation of wounded soldiers. Officials from the Surgeon General's Office have called upon Teachers College to assist in discovering properly qualified school men to act as special educational officers in the reconstruction hospitals, and three Teachers College men have already been assigned to this important work. Their duties will be to arrange for and supervise, under the direction of the commanding officer of the hospital, the means provided for the use of therapeutic work, such as curative workshops, classes, etc., to act as technical adviser to the commanding officer on this subject; to recommend the development of necessary means to keep patients employed so far as it is possible to do so; to make the necessary records of work done in his department; and to have immediate charge of any special training of vocational nature which can be given with the means at hand.

These officers are to be obtained from the ranks of teachers, vocational instructors, and others especially qualified, and will be selected for their training, experience, and peculiar fitness for the work. Where it is possible to get a man who is himself handicapped by some physical disability, and who has made a success in life, it is expected to do so.

By the employment of the measure proposed, it is expected not only to hasten the recovery of the patients but that an environment will be created in military hospitals, which, while in no way relaxing the necessary discipline, will greatly promote contentment, and make the atmosphere of these hospitals such that the time spent in convalescence will pass most pleasantly because the minds and hands of the patients are properly occupied in profitable pursuits.

STANDARDS FOR JUDGING TEXT-BOOKS

For several years a group of the Faculty of Teachers College interested particularly in the principles of education and methods of teaching have held informal fortnightly discussions concerning problems of common interest. As a result of one series of dis-

cussions there was published in the September, 1915, TEACHERS COLLEGE RECORD, "Principles for Making School Curricula."

This winter the discussions have concerned standards for judging text-books. Recognizing the tremendous influence that text-books have in determining courses of study as well as methods of teaching, the group has formulated theses which, it is hoped, will influence authors and publishers in the preparation of books and schoolmen in their selection. The results of this study will be published in a later issue of the RECORD.

FINE ARTS

An interesting letter has been received by Professor Dow from Claggett Wilson, former instructor, dated, "Somewhere in France," March 15. Mr. Wilson writes that he had just received a letter from George J. Cox, also a former instructor, and now with the Canadian forces, and that Mr. Cox "seems to be fit and busy and says Mrs. Cox is the same."

Cards have also been received from Francis Clarke and Robert Taylor both in France.

Miss Amy Drevenstedt and Mrs. Clyde M. Myres, of the fine arts department, are to go to France as reconstruction aides. Mrs. Myres will be in charge of the squad.

Mr. Alon Bement is in Government service as artist.

The fine arts classes, under Miss Tannahill, are engaged upon War Savings Stamp propaganda in the form of posters and post cards.

The classes in house design are now in charge of Mrs. Mary Linton Bookwalter Ackerman, Professor Warner having accepted a position with the Methodist Board of Missions as director of a pageant and exhibits. Mrs. Ackerman is one of the best known decorators in New York. She brings to the students not only her own experience, but the opportunity to see what is actually being done in studios and shops.

The following lectures and demonstrations by craftsmen and architects have been given recently: Mr. Clement Heaton, who is not only a creator in stained glass, but an authority upon the history of mediæval crafts, lectured to the students and afterward invited them to his studio to inspect work in progress; Miss

Euphemia Whittredge brought examples of colored textiles and showed others that had been used in a number of important houses; Mr. Dilley gave an exhibit of choice Persian rugs and invited the classes to spend Saturday afternoon with him; Mr. Alexander B. Trowbridge, the architect, also spoke to the students.

Mr. Horace Moran is instructing the seniors in the historic styles and architectural detail in special sessions at the Metropolitan Museum rooms. The course will be followed by a visit to studios where work is in progress.

Professor Dow has prepared for the College Art Association a paper upon fine arts courses for candidates for the higher degrees; and for the Eastern Arts Association an address upon "The Minimum Requirement in Drawing for Normal Schools."

The department now has twenty stars in its service flag.

The new courses for reconstruction aides are now being given, partly by fine arts instructors as follows: Design and Block-Printing, by Professor Dow and Miss Cole; Basket-weaving, by Miss Humphrey and Miss Bliss; Tin-can Work (making of articles from used tin cans), by Mr. Thatcher; Wood-cutting, by Mr. Thatcher and Mr. Coombs; Clay-modeling, by Mr. Upjohn.

The novelty of the Tin-can course has attracted considerable attention. A great variety of tin toys of a type that can be readily constructed by the convalescent soldiers has been devised. Discarded tomato cans, sardine tins, and talcum boxes are converted into realistic models of battleships, aeroplanes, locomotives, automobiles, and tanks. The tin-toy industry promises to be a very important contribution in the field of occupational rehabilitation. To anticipate this, Mr. Thatcher has recently completed arrangements with Lippincott's for the early publication of a volume describing in detail its possibilities.

Some very interesting work is also being done in pottery and clay-modeling by the students of occupational therapy. Under the direction of Mr. Upjohn an eight weeks' special course is being given. The work of the first four weeks will be useful in the following trades: Architectural terra cotta, stone and wood-carving, interior decoration, metal work, especially bronze and iron, jewelry, and silver-smithing. The second four weeks are devoted to the making of hand-built pottery, particularly vases,

bowls, and dishes, and includes the use of the potter's wheel, glazing, and firing.

During the past year an especial attempt has been made by Mr. Upjohn to develop forms from native Indian specimens in the belief that contemporary art can gain much from a careful study of these primitive American models. There has also been a consideration of Persian ware and of Chinese pottery, especially that of the Sung, Yuan, and T'ang periods, and many adaptations have been made from available pieces in the Metropolitan Art Museum.

FOODS AND COOKERY

Miss Anna Barrows has returned after an extended trip throughout the country in connection with her work with the States Relation Service. She will leave soon for her farm work in Fryeburg, Maine, where she is expecting to establish a sort of summer school in home economics for a limited number of students who wish to live on a war basis, and put the principles of home economics into practice.

Mrs. Gunn is doing food conservation work for *McCall's Magazine.*

Miss Shapleigh is doing food conservation work for *To-day's Housewife,* and is lecturing for the Food Administration on the use of substitutes. She is also holding conferences with groups of women for this purpose. Miss Shapleigh recently gave a series of demonstrations on Saturday morning, for the group of women under Mrs. Frank Gray Griswold who are combined for the purpose of putting into operation the voluntary ration system here in New York City.

Miss Peacock and Miss Stone are carrying on extensive experiments in canning and drying. In preparation for the work this summer they are holding conferences with women who expect to start community kitchens for food conservation.

Miss Monroe, formerly instructor in experimental cookery, is now city leader for New York City under the State Food Commission, working with Mrs. Rose who is deputy director of food conservation of New York City. Miss Monroe is on a leave of absence for this war work.

Professor Van Arsdale is at present serving on the advisory committee of the Food Conservation Bureau for New York City and has recently been appointed a member of the Farms and Markets Council under the New York State Food Bill. The Farms and Markets Council coördinates the work of the Department of Agriculture and the Department of Farms and Markets of New York State.

NUTRITION

Professor Mary S. Rose, of the department of nutrition, has been appointed deputy director of the Bureau of Conservation of the State Food Commission of New York State and put in charge of the work in New York City. She has chosen as city leader Miss Day Monroe, instructor in foods and cookery, Teachers College, who has been granted leave of absence for this service. Previous to this appointment Professor Rose had been designated as director of home economics for New York City by the Federal Food Administration.

Acting as an advisory committee for the Bureau of Conservation are Professor Sherman and Professor Van Arsdale, of Teachers College; Isabel Ely Lord, director of household science and art, Pratt Institute; Grace Schermerhorn, director of cooking in the New York Public Schools; and Alice Wright Penrose, director of home economics in the Young Women's Christian Association.

The bureau has a staff of demonstrators including Edith Barber, Emma Johnson, Mrs. Louise Nellis, Leonora Van der Sloot, Mary Barber, Mollie Gold, and Mrs. Florence Wright, all but one of whom are graduates of Teachers College.

RURAL EDUCATION

Miss Marie Lovsnes, for the past two years instructor in rural education in Teachers College, has accepted a position as rural community organizer in Litchfield County, Connecticut, where her new duties will begin June 1. This work, which is one of the most unique and interesting fields of rural leadership in the United States, was developed recently through the Farm Bureau

of Litchfield County upon the initiative of its president, Professor Emeritus Richard E. Dodge, of Teachers College.

The selection of a county in New Jersey to serve as a local field for Teachers College activities in rural education and country life is creating considerable interest. Somerset, Hunterdon, and Warren are the counties most favorably considered. These counties will all be partially surveyed by Dr. Wilson's class in rural social surveys, and will also be visited by representatives of the departments of nursing and household arts.

SCOUTING

In order to increase the efficiency of the Boy Scouts of America and help win the war, Teachers College in coöperation with the Department of Education of the Boy Scouts of America, the Manhattan Council, and other councils in and near New York has conducted nine meetings in Scouting. Six of these meetings were on consecutive Thursday evenings, from eight to ten o'clock, beginning March 7, 1918, in the Thompson Gymnasium, Teachers College. The three other meetings were hikes starting from the gymnasium Saturday afternoons at two o'clock.

These meetings were intended for all men interested in scouting as a national service. The men were organized as a troop. Scouting activities were conducted with just enough theory to make clear the aim of the movement and the work that is being attempted in scouting.

A certificate in recognition of satisfactory completion of this course was issued jointly by Teachers College, Columbia University, and the National Council, Boy Scouts of America.

Troop dues were ten cents for each of the nine meetings with no other fees. Two hundred and ninety-five men took the course, the majority of these being from outside the University.

The meetings and hikes were in charge of Elbert K. Fretwell, associate in scouting, Teachers College, Columbia University; Sereno Stetson, instructor in scouting, Teachers College, Columbia University, scoutmaster, Troops 60 and 101, Manhattan, deputy scout commissioner, Manhattan; Lorne W. Barclay, director, Department of Education, Boy Scouts of America; H. G. Nesslage, acting scout executive, Manhattan Council, Boy Scouts of America.

A number of special leaders also contributed to the success of the course. Among those were: C. J. Atkinson, executive secretary, Boys' Club Federation; Dan Beard, national scout commissioner, vice-president, National Council, Boy Scouts of America, author; Belmore Brown, author of *Conquest of Mount McKinley*, Alaskan explorer; Dr. C. Ward Crampton, director of physical training, New York City public schools, president of Manhattan Council, Boy Scouts of America; Frank F. Gray, scout commissioner, Montclair, New Jersey; Pirie MacDonald, photographer of men, scout commissioner, Norwalk, Connecticut; L. L. McDonald, director of camping, Boy Scouts of America, formerly scout executive, Chicago, Illinois; Franklin K. Mathiews, chief scout librarian; W. C. Miller, deputy commissioner, Manhattan Council; F. F. Moon, acting dean, New York State College of Forestry at Syracuse University; James E. Russell, dean of Teachers College, Columbia University, member of committee on education, Boy Scouts of America; Charles F. Smith, deputy scout commissioner, scoutmaster Troop 1, Staten Island, manual and physical training director, Staten Island Academy; F. K. Vreeland, Arctic explorer, big game hunter, scoutmaster, Montclair, N. J.; James E. West, chief scout executive, Boy Scouts of America; James A. Wilder, chief sea scout, Boy Scouts of America, former national special scout commissioner of Hawaii.

THE NEWMAN CLUB

The Newman Club coöperated with the New York City campaign for the Knights of Columbus War Fund, realizing $1,270 in a three-days' drive. Sixty per cent of the Knights of Columbus Fund is to be used for non-sectarian purposes, and the remainder for sending Catholic chaplains to the front.

As a war service, the club girls are acting as hostesses at Mrs. Vanderbilt's House for Soldiers and Sailors, on Saturday nights.

The club has planned a trip to Maryknoll, N. Y., about the middle of May to attend the semi-annual meeting of the Ladies' Auxiliary of the School of Foreign Missionaries.

Two delegates will be sent this summer to Cliffhaven, Lake Champlain, to attend the conference of Catholic college clubs.

ALUMNI ACTIVITIES

TEACHERS COLLEGE IN WAR SERVICE

To the lists already published in the RECORD the following names are added of alumni and students of Teachers College who are serving in the war in some capacity.

Blake, Harold, private, Medical Corps, Base Hospital 44.

Blake, Isabel M., Red Cross Unit, relief work, Palestine.

Crowell, Joseph, Ordnance Department, U. S. Army.

Darling, Margaret, Home Service Bureau, Red Cross, Burlington, Vt.

Drevenstedt, Amy, reconstruction aide.

De Zeller, Mabel C., reconstruction aide.

Dwyer, Maurice K., aviation service, U. S. Army.

Eaton, Franc L., Base Hospital, Camp Joseph Johnston, Jacksonville, Fla., dietitian.

Fowle, Theodore W., U. S. inspector of powder and explosives, DuPonts.

Gifford, W. J., educational secretary, Tidewater district, Y. M. C. A. War Work Council, Newport News, Va.

Gompf, August P., aviation section, Signal Corps, U. S. Army.

Gross, Ellen K., recreation work, Portsmouth, Va.

Higbie, Edgar C., special reconstruction work for convalescent soldiers.

Hamilton, O. T., Y. M. C. A., to be assigned for work with American Expeditionary Force, France.

Jansen, William, private, 15th Co., 152nd Depot Brigade, Camp Upton.

Jessup, Theodora, Red Cross Unit, relief work, Palestine.

Myres, Mrs. Clyde M., reconstruction aide, France.

McElfish, Russell C., Psychological Co., No. 1, Camp Greenleaf, Chickamauga Park, Ga.

Nichol, James H., Red Cross Unit, relief work, Palestine.

Nudd, Howard, captain.

Ricker, Kate, Ordnance Department, Washington, D. C., clerk.

Riley, John L., educational officer and director of athletics, Camp McPherson.

Saville, Fannie E., dietitian, Base Hospital, U. S. A. M. C., Camp Travis, San Antonio, Texas.

Spencer, W. A., first lieutenant, Co. F., 59th Infantry, Camp Greene, Charlotte, N. C.

Truesdale, Mrs. Maude, executive secretary, Women's Land Army, State of New Jersey.

Unusual interest is attached to the appointments of Misses De Zeller and Drevenstedt and Mrs. Myres mentioned above. All three are to be special teachers of occupations to convalescent soldiers in France and have been assigned to the first unit of its kind to be sent abroad by the Government. This squad is in charge of Mrs. Myres and consists of six members, each with the title of Reconstruction Aide.

The following communication has been received from the International Committee of the Y. M. C. A.:

"Walter Woody reported by cable, arrived at Murmansk, Russia, April 20, 1918."

PITTSBURGH TEACHERS COLLEGE CLUB

Although war service and duties attendant upon war work prevented a large gathering, about thirty-five enthusiastic men and women assembled at the Hotel Chatham to greet Professor William Kilpatrick on the evening of March 15. The meeting was opened by the president, Miss Harriet Carter, who introduced Mr. Frank M. Leavett, associate superintendent in charge of industrial education in the Pittsburgh schools, as the principal speaker. His most interesting remarks were followed by a patriotic address by Superintendent Davidson, and by a number of short speeches from the floor relating to war topics and the work carried on by members of the club.

The following officers were elected for the ensuing year: President, Mr. John A. Hollinger; vice-president, Mrs. E. C. Noyes; secretary-treasurer, Miss Jane Mathews. A publicity committee was also chosen to promote the interest of the club; its members are: Mr. J. F. Guy, Mr. Raymond W. Sies, and Miss Hinmon.

NORTHEASTERN OHIO TEACHERS COLLEGE CLUB

The Teachers College alumni of northeastern Ohio organized a Teachers College club in Cleveland on February 23, 1918, with an initial membership of eighty. This is the latest of the Teachers College clubs and gives promise of being one of the largest in existence as there are over 300 Teachers College alumni in and about Cleveland. The new officers of the club are president, Agnes B. Slaymaker; vice-president, Fred R. Powers; secretary, James C. Bay; corresponding secretary, E. W. Boshart; and treasurer, Margaret B. Collins. The chairmen of standing committees are, program, Adelaide L. Van Duzer; activities, R. G. Jones; social, Mary Converse.

The new club has plans for holding six meetings a year in order to do all possible to further the interests of the alumni of northeastern Ohio. All who are interested in joining this club should write to Mr. E. W. Boshart, corresponding secretary, West Technical High School, Cleveland.

TEACHERS COLLEGE DINNER AT ATLANTIC CITY

The annual Teachers College alumni dinner was held on Tuesday evening, February 26, at the Hotel Traymore in Atlantic City in connection with the meeting of the Department of Superintendence of the National Education Association. This year's dinner was attended by over 500 loyal alumni from all parts of the United States, the attendance being the largest of any alumni dinner yet held.

All former Teachers College students eagerly look forward to the Teachers College dinners as the most important social and professional alumni meeting of the year. Those in attendance included the usual list of leaders in education who are holding some of the most important positions in this country. Among the alumni present were 119 superintendents of schools, 81 college professors and instructors in education, 10 college presidents and deans, 3 state commissioners of education, 17 normal school principals, 22 high school principals, 3 deans of women, 8 state school officers, 7 specialists in statistical research, 9 directors of

vocational education, 53 supervisors, critics, and elementary school principals, and 93 graduate students of Teachers College. No educational meeting held in this country brings together a more important group of educators than that represented by this list.

The men and women dined together in the large banquet hall of the Hotel Traymore. Between courses there were college songs and cheers for various members of the staff.

The toastmaster of the evening was Dr. Charles A. Prosser, director of the Federal Board for Vocational Education, who spoke very earnestly of the great opportunities now open to educators to train technical specialists for important forms of war work. The other speakers of the evening were: Dr. H. T. J. Coleman, dean of the Faculty of Education of Queens University, Kingston, Canada; Miss Mabel Carney, instructor in rural education, Teachers College; Dr. Jesse D. Burks, now a captain in the United States Army; Mr. Alexander M. Duskin, of the Bureau of Jewish Education, New York City; and Dean Russell. Dean Russell gave an address on "Education for Democracy" which appears in this number of the RECORD.

Thirty-three members of the staff of Teachers College attended the dinner.

RECENT ALUMNI APPOINTMENTS

In addition to those names listed in the March RECORD, the following are announced by the Appointment Committee of Teachers College:

Miss Julia Ryder, normal training teacher, county high school, Summerville, W. Va.

Mr. L. E. A. Saidla, instructor in history and English, Roxbury School, Cheshire, Conn.

Miss Pauline A. Smith, instructor in history, Hope Farm, Verbank, N. Y.

Miss Martha Squires, extension worker, Springfield, Mass.

Miss Lulu E. Stallman, extension work, University of Texas, Austin, Texas.

Miss Mary Jessie Stone, district agent, Agricultural and Mechanical College, Texas.

Miss Mattie E. Stover, instructor in nutrition, foods, and cookery, University of Pittsburgh, Pittsburgh, Pa.

Miss Mary S. Thayer, director of kindergarten and first grade, Liggett School, Detroit, Mich.

Miss Alice Thomas, instructor in home economics, State College for Women, Tallahassee, Fla.

Miss Alice Thompson, critic teacher, State Normal School, Trenton, N. J.

Miss Nellie E. Thompson, head of Latin department, Speyer School, New York City.

Miss Elizabeth Thorpe, instructor in mathematics, high school, Salt Lake City, Utah.

Miss Emma M. Ueland, instructor in textiles and clothing, State Normal School, Stevens Point, Wis.

Miss Leonora Van der Sloot, lecturer and demonstrator, State Food Commission, New York City.

Miss Mary E. Wall, instructor in Latin, high school, Leonardo, N. J.

Miss Gladys J. Ward, assistant, emergency extension work, Baltimore, Md.

Miss Harriet Ware, extension work, Rutgers College, New Brunswick, N. J.

Miss Estella T. Weeks, assistant director in Division of Reference and Service, Committee on Public Information, Washington, D. C.

Mr. Granville Allen Young, instructor in English and history, Commercial High School, Atlanta, Ga.